As confidentially submitted to the Securities and Exchange Commission on August 21, 2013
Registration No. 333-

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

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

GlycoMimetics, Inc.
(Exact name of registrant as specified in its charter)

Delaware	2834	06-1686563
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

401 Professional Drive, Suite 250
Gaithersburg, MD 20879
(240) 243-1201
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Rachel K. King
Chief Executive Officer
GlycoMimetics, Inc.
401 Professional Drive, Suite 250
Gaithersburg, MD 20879
(240) 243-1201
(Name, address, including zip code, and telephone number, including area code, of agent for service)

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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, 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. ☐

CALCULATION OF REGISTRATION FEE

TITLE OF SECURITIES BEING REGISTERED	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE[(1)(2)]	AMOUNT OF REGISTRATION FEE
Common Stock, $0.001 par value per share	$	$

(1) In accordance with Rule 457(o) under the Securities Act of 1933, as amended, the number of shares being registered and the proposed maximum offering price per share are not included in this table.
(2) Estimated solely for purposes of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act.

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 under the Securities Exchange Act of 1934. (Check one):

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☐

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 that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold 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 , 2013

PRELIMINARY PROSPECTUS

Shares

Common Stock

We are offering shares of our common stock. This is our initial public offering and no public market currently exists for our common stock. We expect the initial public offering price to be between $ and $ per share.

We intend to apply to list our common stock on The NASDAQ Global Market under the symbol “GLYC.” We are an “emerging growth company” as that term is used in the Jumpstart Our Business Startups Act of 2012 and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings.

Investing in our common stock involves a high degree of risk. Please read “Risk Factors” beginning on page 11 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	PER SHARE	TOTAL
Public Offering Price	$	$
Underwriting Discounts and Commissions		
Proceeds to GlycoMimetics, Inc. before expenses		

Delivery of the shares of common stock is expected to be made on or about , 2013. We have granted the underwriters an option for a period of 30 days to purchase an additional shares of our common stock. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable by us will be $, and the total proceeds to us, before expenses, will be $.

Joint Book-Running Managers

Jefferies **Barclays**

Co-Managers

Stifel **Canaccord Genuity**

Prospectus dated , 2013

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We and the underwriters 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 and the underwriters 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.

Through and including , 2013 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

For investors outside the United States: We 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 in the United States. Persons who come into possession of this prospectus and any applicable free writing prospectus in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus and any such free writing prospectus applicable to that jurisdiction.

PROSPECTUS SUMMARY

This summary highlights 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 sections "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," in each case included in this prospectus. Unless the context otherwise requires, we use the terms "GlycoMimetics," "company," "we," "us" and "our" in this prospectus to refer to GlycoMimetics, Inc.

Company Overview

We are a clinical stage biotechnology company focused on the discovery and development of novel glycomimetic drugs to address unmet medical needs resulting from diseases in which carbohydrate biology plays a key role. Glycomimetics are molecules that mimic the structure of carbohydrates involved in important biological processes. Using our expertise in carbohydrate chemistry and knowledge of carbohydrate biology, we are developing a pipeline of proprietary glycomimetics that inhibit disease-related functions of carbohydrates, such as the roles they play in inflammation, cancer and infection. We believe this represents an innovative approach to drug discovery to treat a wide range of diseases.

We are focusing our initial efforts on drug candidates for rare diseases that we believe will qualify for orphan drug designation. We are developing our lead drug candidate, GMI-1070, also known as rivipansel sodium, for the treatment of vaso-occlusive crisis, or VOC, one of the most severe complications of sickle cell disease. VOC is typically characterized by excruciating, debilitating pain that occurs periodically throughout the life of a person with sickle cell disease. According to the U.S. Centers for Disease Control and Prevention, there were approximately 73,000 hospitalizations related to VOC in the United States in 2010. The standard of care in the United States for people experiencing VOC is to manage its symptoms, which typically includes hospitalization, narcotic pain management and hydration. There are no approved therapies that interrupt VOC once it has started or that treat the underlying cause of the pain.

In April 2013, we completed a Phase 2 clinical trial in which 76 patients hospitalized for VOC were treated with the standard of care plus either GMI-1070 or placebo. In this trial, patients treated with GMI-1070 experienced reductions in time to reach resolution of VOC, length of hospital stay and use of opioid analgesics for pain management, in each case as compared to patients receiving placebo. GMI-1070 has received fast track designation from the U.S. Food and Drug Administration, or FDA, as well as orphan drug designation from the FDA in the United States and from the European Medicines Agency in the European Union. We believe that GMI-1070, if approved, would be the first drug to interrupt the underlying cause of VOC, thereby potentially reducing the use of narcotics for pain management and enabling patients to leave the hospital more quickly.

In October 2011, we entered into a collaboration with Pfizer Inc., under which Pfizer is now responsible for the further clinical development, regulatory approval and potential commercialization of GMI-1070 for all indications and Pfizer has commercial rights to GMI-1070 worldwide. Under this collaboration, we received an upfront payment of $22.5 million from Pfizer, and we are eligible to receive additional milestone payments totaling up to $320.0 million. We are also eligible to receive tiered, low double-digit royalties based on net sales of GMI-1070 worldwide.

Our proprietary glycomimetics platform is based on our expertise in carbohydrate chemistry and our understanding of the role carbohydrates play in key biological processes. Most human proteins are modified by the addition of complex carbohydrates to the surface of the proteins. The addition of these carbohydrate structures affects the functions of these proteins and their interactions with other molecules. Our initial research and development efforts have focused on drug candidates targeting selectins, which are proteins that

serve as adhesion molecules and bind to carbohydrates that are involved in the inflammatory component and progression of a wide range of diseases, including hematologic disorders, cancer and cardiovascular disease. For example, we believe that members of the selectin family play a key role in the onset and progression of VOC and that GMI-1070, which binds to all three members of the selectin family, E-, P- and L-selectin, inhibits the role that selectins play in VOC. We believe our expertise in carbohydrate chemistry and our understanding of carbohydrate-protein binding interactions enable us to design selectin antagonists and other glycomimetics that inhibit the disease-related functions of certain carbohydrates.

Building on our experience with GMI-1070, we are developing a pipeline of other glycomimetic drug candidates. Our second most advanced drug candidate, GMI-1271, is a specific E-selectin inhibitor, which we are developing to be used in combination with chemotherapy to treat patients with acute myeloid leukemia, or AML, and potentially other hematologic cancers. E-selectin plays a critical role in binding cancer cells within vascular niches in the bone marrow, which prevents the cells from entering circulation where they can be more readily killed by chemotherapy. We believe that by inhibiting binding interactions between cancer cells and the bone marrow, GMI-1271 may mobilize cancer cells out of the bone marrow and make them more sensitive to chemotherapy, thereby improving response rates and duration of remission in patients with AML. We plan to file an investigational new drug application, or IND, for GMI-1271 in the first quarter of 2014. Assuming the IND is accepted, we plan to initiate a Phase 1 dose-escalation clinical trial of GMI-1271 in healthy volunteers in the second quarter of 2014. We intend to follow this trial with Phase 1/2 dose-escalation clinical trials in AML patients.

Our preclinical pipeline also includes other E-selectin antagonists that we are designing and testing for oral availability, glycomimetic compounds that simultaneously target both E-selectin and a chemokine receptor known as CXCR4, and glycomimetic compounds focused on other targets. For example, we are investigating several compounds, including GMI-1051, to treat pseudomonas infections in combination with antibiotics.

We have retained the worldwide development and commercialization rights to all of our drug candidates other than GMI-1070. Our intellectual property portfolio contains issued patents and patent applications directed to, among other things, compositions of matter and methods of use for our drug candidates. Our issued patents directed to GMI-1070 are predicted to expire between 2023 and 2029, and our patent applications directed to GMI-1271, if issued, are predicted to expire between 2032 and 2033.

We were founded in 2003 and are headquartered in Gaithersburg, Maryland. Our principal investors are funds managed by New Enterprise Associates, Genzyme Corporation, Anthem Capital, Alliance Technology Ventures and Rosetta Capital.

Our Strategy

Our goal is to be the leader in the discovery, development and commercialization of novel glycomimetic drugs to address unmet medical needs resulting from diseases in which carbohydrate biology plays a key role. Leveraging the potentially broad applicability of our proprietary glycomimetics platform, our initial focus is to internally develop and advance orphan drug candidates targeted at hematologic cancers and other diseases, and to out-license any drug candidates we may develop that are targeted at larger market opportunities. The key elements of our strategy are to:

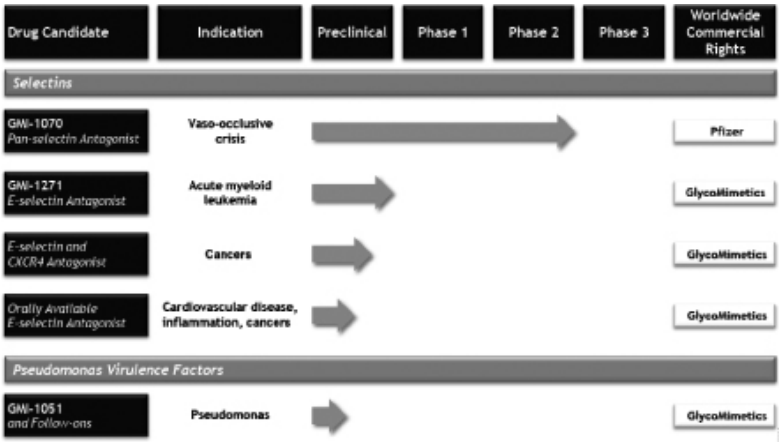
- ***Support Pfizer's further development of our lead drug candidate, GMI-1070.*** Based on the data from our Phase 2 clinical trial for GMI-1070, we believe GMI-1070 has the potential to become the first drug approved to treat VOC. We will continue to work with Pfizer as it proceeds with further clinical development of GMI-1070, including the Phase 3 clinical trial that we expect Pfizer to initiate in mid-2014, and pursues regulatory approval of GMI-1070. We expect to use any milestone and royalty payments that we may receive from Pfizer to accelerate the development of our other drug candidates.
- ***Rapidly advance GMI-1271 for the treatment of AML.*** We intend to build on our experience developing GMI-1070 to rapidly advance GMI-1271 for the treatment of AML in combination with

chemotherapy. We plan to file an IND with the FDA in the first quarter of 2014 for this indication. Assuming the IND is accepted, we plan to initiate a Phase 1 dose-escalation clinical trial in healthy volunteers in the second quarter of 2014, to be followed by Phase 1/2 dose-escalation clinical trials in defined populations of patients with AML. We have retained worldwide development and commercialization rights to GMI-1271.

- ***Identify and develop additional novel selectin antagonists to address unmet medical needs with significant market potential.*** We believe our glycomimetics platform will enable us to develop a broad pipeline of potential drug candidates that may be orphan drugs or may address larger market opportunities. We are in the process of selecting and intend to develop a drug candidate that simultaneously inhibits both E-selectin and CXCR4 for use in the treatment of cancers with significant bone marrow involvement, such as myeloma. We are also working to design an orally available E-selectin antagonist, which we believe could be of significant interest to potential collaborators for major market opportunities, such as the treatment of cardiovascular disease.
- ***Apply our insights and our glycomimetics platform to other carbohydrate targets beyond selectins.*** We have identified additional opportunities where carbohydrates play critical roles in disease processes and where we believe we can apply our platform to create targeted glycomimetic drugs. One potential target is pseudomonas, a pathogenic form of bacteria that results in serious infections and is frequently resistant to treatment with antibiotics. We have observed results in animal models that suggest glycomimetic drugs can be used to improve treatment of pseudomonas infections. We have an active preclinical program testing and optimizing compounds to treat these infections.

Our Pipeline

We have discovered our drug candidates internally through a rational drug design approach that couples our expertise in carbohydrate chemistry with our knowledge of carbohydrate biology. We are actively developing glycomimetic drug candidates based on this expertise.



GMI-1070—Targeting Selectins to Treat VOC

We are developing GMI-1070, a glycomimetic drug candidate that acts as a pan-selectin antagonist, meaning that it binds to all three members of the selectin family, to treat VOC. We believe that GMI-1070, by acting as a pan-selectin antagonist, inhibits the role that selectins play in VOC. We have completed four clinical trials of GMI-1070 involving a total of 163 subjects.

In April 2013, we completed a Phase 2 clinical trial in 76 patients hospitalized for VOC. This was a randomized, double-blind, placebo-controlled trial evaluating the safety, efficacy and pharmacokinetics of standard of care plus multiple intravenous, or IV, doses of either GMI-1070 or placebo in patients ranging from

12 to 60 years old. In this trial, patients treated with GMI-1070 experienced reductions in the time to reach resolution of VOC, length of hospital stay and use of opioid analgesics for pain management, in each case as compared to patients receiving placebo. The time to reach resolution of VOC, the primary endpoint of the trial, was reduced in the patients receiving GMI-1070 by over 40 hours, the time to hospital discharge was reduced by over 50 hours, the time to transition off IV analgesics was reduced by over 45 hours and the cumulative amount of opioid analgesic administered during hospitalization was reduced by over 80%. Although the study was not large enough to detect statistically significant differences, we believe the reductions we observed in these measures with GMI-1070 therapy, and the consistency of a positive response across multiple measures related to a VOC episode, demonstrate the potential benefit of GMI-1070.

If GMI-1070 is demonstrated to be safe and effective for the treatment of VOC, we believe it may show substantial clinical and pharmacoeconomic benefit and may therefore result in a significant market opportunity for GMI-1070 worldwide. In addition, if GMI-1070 is shown to be safe and effective at reducing the duration of VOC in hospitalized patients, it could also be tested in people experiencing VOC who are not hospitalized to determine if hospitalization could be prevented. Following the completion of the Phase 2 clinical trial, Pfizer is responsible for all further development and commercialization efforts with respect to GMI-1070.

GMI-1271—Targeting the Bone Marrow Microenvironment to Treat Hematologic Cancers

We are developing GMI-1271, a specific E-selectin antagonist, to be used in combination with chemotherapy to treat AML and potentially other hematologic cancers. GMI-1271 targets interactions between cancer cells and the bone marrow microenvironment. Leukemia cells bind to E-selectin in the bone marrow, where they are somewhat protected from chemotherapy. In preclinical studies, E-selectin inhibition disrupted the adhesion of leukemia cells in the bone marrow and mobilized them out of the bone marrow and into the bloodstream, making them more sensitive to chemotherapy. In other preclinical studies, GMI-1271 reduced some of the toxic effects of chemotherapy, such as neutropenia and mucositis, on normal cells. As a result, we believe GMI-1271 may improve chemotherapy response rates, duration of remission and, ultimately, survival in patients with hematologic cancers like AML.

AML, a hematologic cancer that is characterized by the rapid growth of abnormal white blood cells that accumulate in the bone marrow and interfere with the production of normal blood cells, is a relatively rare disease, but one that accounts for the largest number of annual deaths from leukemia in the United States. The American Cancer Society estimates that in 2013, approximately 15,000 people in the United States will be diagnosed with AML and over 10,000 people in the United States will die of the disease.

We are planning to hold a pre-IND meeting with the FDA in the fourth quarter of 2013 and to file an IND for GMI-1271 in the first quarter of 2014. Assuming the IND is accepted, we plan to initiate a Phase 1 dose-escalation clinical trial in healthy volunteers in the second quarter of 2014, to be followed by Phase 1/2 dose-escalation clinical trials in defined populations of patients with AML.

Drug Candidates Targeting E-selectin and CXCR4

We have identified a family of drug candidates that are designed to simultaneously inhibit both E-selectin and CXCR4. We intend to select one of these drug candidates to be developed for the treatment of cancers with significant bone marrow involvement, such as myeloma. CXCR4 is a binding protein on the surface of stem cells that keeps them in the bone marrow and prevents them from entering the bloodstream. Due to the similar cellular functions of E-selectin and CXCR4 as adhesion molecules that bind cancer cells in the bone marrow, we believe that targeting both E-selectin and CXCR4 with a single compound could improve efficacy in the treatment of cancers that affect the bone marrow, as compared to targeting CXCR4 alone.

GMI-1051 and Other Drug Candidates Targeting Pseudomonas Virulence Factors

Pseudomonas bacteria express and secrete molecules known as virulence factors, which are involved in key functions of bacterial survival and propagation. These virulence factors bind to specific carbohydrate structures, which we believe can be targeted with glycomimetic drugs. We have developed one drug candidate, GMI-1051, which is an antagonist of two important pseudomonas virulence factors, PA-IL and PA-IIL. We have

conducted a number of *in vitro* and *in vivo* preclinical studies of GMI-1051. In each study, GMI-1051 inhibited the functions of both PA-IL and PA-IIL and had greater affinity for these targets than did the native carbohydrates. We also studied GMI-1051 *in vivo* in three animal models of pseudomonas infection. In one study, GMI-1051 improved survival of mice in a chronic lung infection model when given in combination with tobramycin, an antibacterial often used to treat pseudomonas infections, as compared to treatment with tobramycin alone. In two other studies, GMI-1051 reduced bacterial load in an acute lung infection model and improved survival in a model of surgical infection. We are actively testing and optimizing GMI-1051 and other similar compounds to identify the most suitable candidates for further development.

Risks Associated with Our Business

Our business is subject to a number of risks of which you should be aware before deciding to invest in our common stock. These risks are discussed more fully in the “Risk Factors” section of this prospectus. These risks include the following:

- We have incurred significant losses since our inception. We expect to continue to incur losses over the next several years and may never achieve or maintain profitability.
- We will need substantial additional funding to pursue our business objectives. If we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our drug development programs or potential commercialization efforts.
- Our research and development is focused on discovering and developing novel glycomimetic drugs, and we are taking an innovative approach to discovering and developing drugs, which may never lead to marketable drugs.
- We are very early in our development efforts and have only one drug candidate, GMI-1070, that has completed a clinical trial. All of our other drug candidates are still in preclinical development. If we or our collaborators are unable to commercialize our drug candidates or experience significant delays in doing so, our business will be materially harmed.
- Our success is highly dependent on our existing collaboration with Pfizer, and future collaborations may also be important to us. If we are unable to maintain any of these collaborations, or if these collaborations are not successful, our business could be adversely affected.
- Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.
- We face substantial competition, which may result in others discovering, developing or commercializing drugs before or more successfully than we do.

Corporate Information

We were incorporated under the laws of the State of Delaware in April 2003 and commenced operations in May 2003. Our principal executive offices are located at 401 Professional Drive, Suite 250, Gaithersburg, Maryland 20879. Our telephone number is (240) 243-1201. Our website address is *www.glycomimetics.com*. The information contained on our website is not incorporated by reference into this prospectus, and you should not consider any information contained on, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase our common stock.

“GlycoMimetics,” the GlycoMimetics logo and other trademarks or service marks of GlycoMimetics, Inc. appearing in this prospectus are the property of GlycoMimetics, Inc. This prospectus contains additional trade names, trademarks and service marks of others, which are the property of their respective owners.

Implications of Being an Emerging Growth Company

As a company with less than $1 billion in revenue during our last fiscal year, we qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from some of

the reporting requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced “Management’s Discussion and Analysis of Financial Condition and Results of Operations” disclosure;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- 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;
- reduced disclosure obligations regarding executive compensation; and
- not being required to hold a non-binding advisory vote on executive compensation or obtain stockholder approval of any golden parachute payments not previously approved.

We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least $1 billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700 million as of the prior June 30th and (2) the date on which we have issued more than $1 billion in non-convertible debt during the prior three-year period. We may choose to take advantage of some, but not all, of the available exemptions. We have taken advantage of some reduced reporting burdens in this prospectus. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

In addition, under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards 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.

The Offering

Common stock offered by GlycoMimetics	shares
Total common stock to be outstanding after this offering	shares
Option to purchase additional shares of common stock	We have granted the underwriters an option for a period of 30 days from the date of this prospectus to purchase an additional shares of our common stock.
Use of proceeds	We expect the net proceeds to us from this offering, after expenses, to be approximately $ million, 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. The principal purposes of this offering are to create a public market for our common stock and to facilitate our future access to the public equity markets, as well as to obtain additional capital. We intend to use the net proceeds from this offering as follows: n approximately $ million to conduct planned Phase 1 and Phase 1/2 clinical trials of GMI-1271; n approximately $ million to fund the research and development of our preclinical pipeline, including drug discovery; and n the remainder for working capital and other general corporate purposes. See “Use of Proceeds” on page 39 for additional information.
Risk factors	See the section titled “Risk Factors” beginning on page 11 and the other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our common stock.
Proposed NASDAQ Global Market symbol	GLYC

The number of shares of our common stock that will be outstanding after this offering is based on 3,127,693 shares of common stock outstanding as of June 30, 2013, and excludes:

- 4,876,698 shares of our common stock issuable upon the exercise of stock options outstanding under our 2003 stock incentive plan as of June 30, 2013, at a weighted average exercise price of $0.37 per share;
- 2,097,625 shares of our common stock issuable upon exercise of warrants outstanding as of June 30, 2013, at a weighted average exercise price of $0.12 per share; and
- shares of our common stock reserved for future issuance under our equity incentive plans following this offering.

Except as otherwise indicated herein, all information in this prospectus, including the number of shares that will be outstanding after this offering, assumes or gives effect to:

- a -for- reverse stock split of our common stock expected to be effected prior to the completion of this offering;
- the conversion of all outstanding shares of our convertible preferred stock into an aggregate of 30,726,326 shares of our common stock, which will occur automatically upon the completion of this offering; and
- no exercise of the underwriters' option to purchase additional shares of our common stock.

Summary Financial Data

The following tables set forth summary financial data of GlycoMimetics, Inc. for the periods indicated. The following summary financial data for the years ended December 31, 2011 and 2012 are derived from our audited financial statements, which have been audited by Ernst & Young LLP, an independent registered public accounting firm, appearing elsewhere in this prospectus. The data should be read together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in conjunction with the financial statements, related notes and other financial information included elsewhere in this prospectus. The summary statement of operations data for the six months ended June 30, 2012 and 2013 and for the period from May 21, 2003 (date of inception) through June 30, 2013 and the summary balance sheet data as of June 30, 2013 are derived from unaudited financial statements appearing elsewhere in this prospectus.

The unaudited financial statements include all adjustments, consisting of normal recurring accruals, that management considers necessary for a fair presentation of the financial position and the results of operations for these periods. Our historical results are not necessarily indicative of the results to be expected in the future, and our operating results for the six months ended June 30, 2013 are not necessarily indicative of the results that may be expected for the entire year ending December 31, 2013 or any other future period.

(in thousands, except share and per share data)	YEAR ENDED DECEMBER 31, 2011	YEAR ENDED DECEMBER 31, 2012	SIX MONTHS ENDED JUNE 30, 2012	SIX MONTHS ENDED JUNE 30, 2013	PERIOD FROM MAY 21, 2003 (DATE OF INCEPTION) TO JUNE 30, 2013
Statement of Operations Data:					
Revenue	$ 3,814	$ 15,257	$ 7,542	$ 3,863	$ 23,465
Costs and expenses:					
Research and development	7,799	9,438	4,256	5,624	64,723
General and administrative	2,100	2,157	1,090	1,263	14,233
Total costs and expenses	9,899	11,595	5,346	6,887	78,956
Income (loss) from operations	(6,085)	3,662	2,196	(3,024)	(55,491)
Other income (expense):					
Interest income (expense), net	8	21	12	1	(172)
Other expense, net	(36)	(27)	(13)	(4)	(34)
Total other expense	(28)	(6)	(1)	(3)	(206)
Net income (loss)	$ (6,113)	$ 3,656	$ 2,195	$ (3,027)	$ (55,697)
Net income (loss) per share of common stock—basic	$ (1.99)	$ 1.19	$ 0.72	$ (0.98)	
Net income (loss) per share of common stock—diluted	$ (1.99)	$ 0.10	$ 0.06	$ (0.98)	
Weighted average shares outstanding—basic	3,066,253	3,069,603	3,069,603	3,095,925	
Weighted average shares outstanding—diluted	3,066,253	36,376,589	36,383,159	3,095,925	
Pro forma net income (loss) per share—basic		$ 0.11		$ (0.09)	
Pro forma net income (loss) per share—diluted		$ 0.10		$ (0.09)	
Pro forma weighted average shares outstanding—basic		33,795,929		33,822,251	
Pro forma weighted average shares outstanding—diluted		36,376,589		33,822,251	

The following table presents our summary balance sheet data:

- on an actual basis as of June 30, 2013;
- on a pro forma basis to give effect to the conversion of all outstanding shares of our convertible preferred stock into an aggregate of 30,726,326 shares of our common stock, which will occur automatically upon the completion of this offering; and
- on a pro forma as adjusted basis to give further effect to our sale of shares of common stock in this offering at 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, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma as adjusted information presented in the summary balance sheet data is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each $1.00 increase or decrease in the 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, would increase or decrease each of cash and cash equivalents, working capital, total assets and total stockholders' equity on a pro forma as adjusted basis 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.

(in thousands)	AS OF JUNE 30, 2013		
Balance Sheet Data:	ACTUAL	PRO FORMA	PRO FORMA AS ADJUSTED
Cash and cash equivalents	$10,778	$ 10,778	
Working capital	9,471	9,471	
Total assets	11,554	11,554	
Total liabilities	1,815	1,815	
Total stockholders' equity	9,738	9,738	

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before you invest in our common stock, you should carefully consider the following risks, as well as general economic and business risks, and all of the other information contained in this prospectus. Any of the following risks could have a material adverse effect on our business, operating results and financial condition and cause the trading price of our common stock to decline, which would cause you to lose all or part of your investment. When determining whether to invest, you should also refer to the other information contained in this prospectus, including our financial statements and the related notes thereto.

Risks Related to Our Financial Position and Capital Needs

We have incurred significant losses since our inception. We expect to continue to incur losses over the next several years and may never achieve or maintain profitability.

Since inception, we have incurred significant operating losses. While we generated net income of $3.7 million for the year ended December 31, 2012 as a result of recognizing $15.0 million of revenue under our license agreement with Pfizer, we incurred net losses of $6.1 million for the year ended December 31, 2011 and $3.0 million for the six months ended June 30, 2013. As of June 30, 2013, we had an accumulated deficit of $55.7 million. We have financed our operations to date with $64.1 million raised in private placements of convertible debt and convertible preferred stock and $22.5 million received in 2011 as an upfront payment under our license agreement with Pfizer. We have not generated any meaningful revenue since our inception other than from the upfront payment.

We have devoted substantially all of our financial resources and efforts to research and development, including preclinical studies and clinical trials. We are still in the early stages of development of our drug candidates, and we have not completed development of any drugs. We expect to continue to incur significant expenses and operating losses over the next several years. Our net losses may fluctuate significantly from quarter to quarter and year to year. Although responsibility for further development, regulatory approval and potential commercialization of our lead drug candidate, GMI-1070, has transferred to Pfizer under our collaboration with them following the recent completion of our Phase 2 clinical trial, we anticipate that our expenses will increase substantially as we:

- commence clinical trials of GMI-1271;
- continue the research and development of our other drug candidates;
- seek to discover and develop additional drug candidates;
- seek regulatory approvals for any drug candidates that successfully complete clinical trials;
- ultimately establish a sales, marketing and distribution infrastructure and scale up external manufacturing capabilities to commercialize any drugs other than GMI-1070 for which we may obtain regulatory approval;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, quality control and scientific personnel;
- add operational, financial and management information systems and personnel, including personnel to support our drug development and planned future commercialization efforts; and
- incur additional legal, accounting and other expenses in operating as a public company.

To become and remain profitable, we must succeed in developing and eventually commercializing drugs that generate significant revenue. This will require us to be successful in a range of challenging activities, including completing preclinical testing and clinical trials of our drug candidates other than GMI-1070, obtaining regulatory approval for these drug candidates and manufacturing and commercializing any drugs for which we may obtain regulatory approval, as well as discovering additional drug candidates. We are only in the preliminary stages of most of these activities. We may never succeed in these activities and, even if we do, may never generate revenue that is significant enough to achieve profitability.

In the case of GMI-1070, our ability to generate revenue is dependent upon the achievement of development, regulatory and commercial milestones and sales sufficient to generate royalties under our license agreement with Pfizer, and the achievement of such milestones is largely out of our control. If Pfizer fails, or chooses not to

continue, to further develop, seek regulatory approval for or commercialize GMI-1070, our ability to generate revenue with respect to GMI-1070 will be significantly reduced or eliminated. Because all of our drug candidates other than GMI-1070 are still in preclinical development, if we are unable to generate revenue from our license agreement with Pfizer, we may never become profitable, and we may not be able to invest in the further development of our other drug candidates.

Because of the numerous risks and uncertainties associated with drug development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. If we are required by regulatory authorities to perform studies in addition to those currently expected, or if there are any delays in completing our clinical trials or the development of any of our drug candidates, our expenses could increase.

Even 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 depress the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts or even continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

We will need substantial additional funding to pursue our business objectives. If we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our drug development programs or potential commercialization efforts.

We believe that the net proceeds from this offering, together with our existing cash and cash equivalents as of June 30, 2013, will enable us to fund our operating expenses and capital expenditure requirements for at least the next 12 months, without giving effect to any potential milestone payments we may receive under our agreement with Pfizer. However, we will need to obtain substantial additional funding in connection with our continuing operations. Our future capital requirements will depend on many factors, including:

- our agreement with Pfizer remaining in effect and our ability to achieve milestones under this and any other license or collaboration agreement that we may enter into in the future, including a potential $35.0 million milestone payment upon dosing the first patient in a Phase 3 clinical trial, of which we may receive $15.0 million as an advance under specified circumstances;
- the progress and results of the Phase 3 clinical trial of GMI-1070 that we expect Pfizer to commence in mid-2014, pending approval through Pfizer's governance process;
- the scope, progress, results and costs of preclinical development, laboratory testing and clinical trials for our other drug candidates, including our planned Phase 1 and Phase 1/2 clinical trials of GMI-1271;
- the number and development requirements of other drug candidates that we may pursue;
- the costs, timing and outcome of regulatory review of our drug candidates;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our drug candidates other than GMI-1070 for which we receive marketing approval;
- any royalties we receive from Pfizer with respect to sales of GMI-1070, if it receives marketing approval;
- the revenue, if any, received from commercial sales of our drug candidates other than GMI-1070 for which we receive marketing approval;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims; and
- the extent to which we acquire or in-license other drug candidates and technologies.

Identifying potential drug candidates and conducting preclinical testing and clinical trials is a time consuming, expensive and uncertain process that takes years to complete, and we and Pfizer or any future collaborators may never generate the necessary data or results required to obtain regulatory approval and achieve product sales. In addition, our drug candidates, if approved, may not achieve commercial success. Our commercial revenue, if any, will be derived from the sale of drugs that we do not expect to be commercially available for many years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts.

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 drug candidates.

Until such time, if ever, as we can generate substantial revenue from the sale of our drugs, we expect to finance our cash needs through a combination of equity offerings, debt financings and license and development agreements. We do not currently have any committed external source of funds other than possible milestone payments and possible royalties under our license agreement with Pfizer. 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 and preferred equity 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 additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may be required to relinquish valuable rights to our research programs or drug candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or other arrangements with third parties when needed, we may be required to delay, limit, reduce or terminate our drug development or future commercialization efforts or grant rights to third parties to develop and market drug candidates that we would otherwise prefer to develop and market ourselves.

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

We commenced operations in 2003, and our operations to date have been largely focused on raising capital, developing our expertise in carbohydrate chemistry and knowledge of carbohydrate biology, identifying potential drug candidates, undertaking preclinical studies and, with respect to GMI-1070, conducting clinical trials. All but one of our drug candidates are still in preclinical development. We have not yet demonstrated our ability to successfully complete later stage clinical trials, obtain regulatory approvals, manufacture a commercial scale drug, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful commercialization. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history.

We may encounter unforeseen expenses, difficulties, complications, delays and other known or unknown factors in achieving our business objectives. With respect to our drug candidates other than GMI-1070, we will need to transition at some point from a company with a research and development focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

We expect our financial condition and operating results to continue to fluctuate significantly from quarter to quarter and year to year due to a variety of factors, many of which are beyond our control. Accordingly, you should not rely upon the results of any quarterly or annual periods as indications of future operating performance.

Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.

Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an “ownership change,” generally defined as a greater than 50% change by value in its equity ownership over a three-year period, the corporation’s ability to use its pre-change net operating loss, or NOL, carryforwards and other pre-change tax attributes to offset its post-change income may be limited. We may experience an ownership change upon the completion of this offering. We may also experience ownership changes in the future as a result of subsequent shifts in our stock ownership. As of December 31, 2012, we had federal NOL carryforwards of $11.4 million, state NOL carryforwards of $1.8 million and research and development tax credit carryforwards of $3.3 million, each of which could be limited if we experience an ownership change.

Risks Related to the Discovery and Development of Our Drug Candidates

Our research and development is focused on discovering and developing novel glycomimetic drugs, and we are taking an innovative approach to discovering and developing drugs, which may never lead to marketable drugs.

A key element of our strategy is to use and expand our platform to build a pipeline of novel glycomimetic drug candidates and progress these drug candidates through clinical development for the treatment of a

variety of diseases. The discovery of therapeutic drugs based on molecules that mimic the structure of carbohydrates is an emerging field, and the scientific discoveries that form the basis for our efforts to discover and develop drug candidates are relatively new. The scientific evidence to support the feasibility of developing drug candidates based on these discoveries is both preliminary and limited. Although our research and development efforts to date have resulted in a pipeline of glycomimetic drug candidates, we may not be able to develop drug candidates that are safe and effective. Even if we are successful in continuing to build our pipeline, the potential drug candidates that we identify may not be suitable for clinical development, including as a result of being shown to have harmful side effects or other characteristics that indicate that they are unlikely to be drugs that will receive marketing approval and achieve market acceptance. If we do not successfully develop and commercialize drug candidates based upon our glycomimetics platform, we will not be able to obtain product revenue in future periods, which likely would result in significant harm to our financial position and adversely affect our stock price.

We are very early in our development efforts and have only one drug candidate, GMI-1070, that has completed a clinical trial. All of our other drug candidates are still in preclinical development. If we or our collaborators are unable to commercialize our drug candidates or experience significant delays in doing so, our business will be materially harmed.

We are very early in our development efforts and have only one drug candidate, GMI-1070, that has completed a clinical trial. All of our other drug candidates are still in preclinical development. We have not completed the development of any drug candidates, we currently generate no revenue from the sale of any drugs and we may never be able to develop a marketable drug. We have invested substantially all of our efforts and financial resources in the development of our glycomimetics platform, the identification of potential drug candidates using that platform and the development of our drug candidates. Other than with respect to GMI-1070, for which our collaborator Pfizer now has the responsibility for further development and commercialization, our ability to generate revenue from our other drug candidates, which we do not expect will occur for many years, if ever, will depend heavily on their successful development and eventual commercialization. The success of those drug candidates will depend on several factors, including:

- successful completion of preclinical studies and clinical trials;
- receipt of marketing approvals from applicable regulatory authorities;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our drug candidates;
- making arrangements with third-party manufacturers for, or establishing, commercial manufacturing capabilities;
- launching commercial sales of the drugs, if and when approved, whether alone or in collaboration with others;
- acceptance of the drugs, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- obtaining and maintaining healthcare coverage and adequate reimbursement;
- protecting our rights in our intellectual property portfolio; and
- maintaining a continued acceptable safety profile of the drugs following approval.

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 drug candidates, which would materially harm our business.

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 drug candidates.

All but one of our drug candidates are in preclinical development, and their risk of failure is high. It is impossible to predict when or if any of our drug candidates will prove safe or effective in humans or will receive regulatory approval. Before obtaining marketing approval from regulatory authorities for the sale of any drug candidate, we or a collaborator must complete preclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of the drug candidate in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more clinical trials can occur at

any stage of development. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later 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 drug candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their drugs.

We or our current or future collaborators may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our or their ability to receive marketing approval or commercialize our drug candidates, including:

- regulators or institutional review boards may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may experience delays in reaching, or fail to reach, agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;
- clinical trials of our drug candidates may produce negative or inconclusive results, including failure to demonstrate statistical significance, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon drug development programs;
- the number of patients required for clinical trials of our drug 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 institutional review boards may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;
- the cost of clinical trials of our drug candidates may be greater than we anticipate;
- the supply or quality of our drug candidates or other materials necessary to conduct clinical trials of our drug candidates may be insufficient or inadequate; and
- our drug candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators, regulators or institutional review boards to suspend or terminate the trials.

If we are required to conduct additional clinical trials or other testing of our drug candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our drug candidates or other testing, if the results of these clinical 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 drug candidates;
- not obtain marketing approval 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;
- be subject to additional post-marketing testing requirements; or
- have the drug removed from the market after obtaining marketing approval.

Our drug development costs will also increase if we experience delays in testing or marketing approvals. We do not know whether any of our preclinical studies or clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant preclinical study or clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our drug candidates or allow our competitors to bring drugs to market before we do, and thereby impair our ability to successfully commercialize our drug candidates.

If we or our collaborators experience delays or difficulties in the enrollment of patients in clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.

We or our collaborators may not be able to initiate or continue clinical trials for our drug candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or

similar regulatory authorities outside the United States. In particular, because GMI-1070 and GMI-1271 are intended to treat patients with sickle cell disease and AML, respectively, both of which represent a relatively low percentage of the population as compared to other diseases, our or our collaborators' ability to enroll eligible patients may be limited or may result in slower enrollment than we anticipate. In addition, some of our competitors have ongoing clinical trials for drug candidates that treat the same or similar indications as our drug candidates, and patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors' drug candidates. Patient enrollment is also affected by other factors, including:

- the severity of the disease or condition under investigation;
- the eligibility criteria for the trial;
- the perceived risks and benefits of the drug candidate;
- the availability of drugs approved to treat the disease or condition under investigation;
- the efforts to facilitate timely enrollment in clinical trials;
- the patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment; and
- the proximity and availability of clinical trial sites for prospective patients.

Our or our collaborators' inability to enroll a sufficient number of patients for clinical trials would result in significant delays and could require us or them to abandon one or more clinical trials altogether. Enrollment delays in these clinical trials may result in increased development costs for our drug candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing.

If serious adverse or unacceptable side effects are identified during the development of our drug candidates, we may need to abandon or limit the development of some of our drug candidates.

If our drug candidates are associated with undesirable side effects in clinical trials or have characteristics that are unexpected, we may need to abandon their development or limit their development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. Many drug candidates that initially showed promise in early stage testing have later been found to cause side effects that prevented their further development.

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

Because we have limited financial and management resources, we focus on a limited number of research programs and drug candidates. As a result, we may forego or delay pursuit of opportunities with other drug candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial drugs or profitable market opportunities. Our spending on current and future research and development programs and drug candidates for specific indications may not yield any commercially viable drugs. If we do not accurately evaluate the commercial potential or target market for a particular drug candidate, we may relinquish valuable rights to that drug candidate through collaboration, licensing or other arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights.

Risks Related to Our Dependence on Third Parties

Our success is highly dependent on our existing collaboration with Pfizer, and future collaborations may also be important to us. If we are unable to maintain any of these collaborations, or if these collaborations are not successful, our business could be adversely affected.

We have limited capabilities for drug development and do not yet have any capabilities for sales, marketing or distribution. Under our license agreement with Pfizer, Pfizer is responsible for all further development, regulatory approval and potential commercialization efforts with respect to GMI-1070. All of our drug candidates other than GMI-1070 are still in preclinical development, and therefore our success is highly dependent on our collaboration with Pfizer. We cannot assure you that Pfizer will continue to develop GMI-1070 in a timely manner, or at all, or, if it achieves regulatory approval, that Pfizer will successfully commercialize GMI-1070.

Our Pfizer collaboration, and any future collaborations we might enter into, may pose a number of risks, including:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue the commercialization of any drug candidates that achieve regulatory approval or may elect not to pursue, continue or renew development or commercialization of drug candidates based on clinical trial results, changes in such collaborators' strategic focus or available funding or external factors, such as an acquisition, that divert resources or create competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a drug candidate, repeat or conduct new clinical trials or require a new formulation of a drug candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, drugs that compete directly or indirectly with our drugs or drug candidates if such collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- drug candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own drug candidates or drugs, which may cause such collaborators to cease to devote resources to the commercialization of our drug candidates;
- a collaborator with marketing and distribution rights to one or more of our drug candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of such drug or drugs;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or termination of the research, development or commercialization of drug candidates, might lead to additional responsibilities for us with respect to drug candidates or might result in litigation or arbitration, any of which would be time consuming and expensive;
- collaborators may not properly maintain or defend our or their intellectual property rights or may use our or their proprietary information in such a way as to invite litigation that could jeopardize or invalidate such intellectual property or proprietary information or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and
- collaborations may be terminated for the convenience of the collaborator and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable drug candidates.

If our collaboration with Pfizer or any other collaborations we might enter into in the future do not result in the successful development and commercialization of drugs, or if one of our collaborators terminates its agreement with us, we may not receive any future research funding or milestone or royalty payments under the collaboration, including the $35.0 million payment for the next milestone under the Pfizer agreement or the potential $15.0 million advance against that milestone payment. In addition, even if we are eligible to receive these payments, they could be substantially delayed. For example, under our license agreement, Pfizer has the option to commence another Phase 2 clinical trial of GMI-1070, and such commencement would delay or inhibit our ability to receive some of the milestone payments we might otherwise have received under the agreement. If we do not receive the funding we expect under these agreements, the development of our drug candidates could be delayed and we may need additional resources to develop our drug candidates. All of the risks relating to drug development, regulatory approval and commercialization described in this prospectus also apply to the activities of our collaborators.

If Pfizer or a future collaborator of ours is involved in a business combination, the collaborator might deemphasize or terminate development or commercialization of any drug candidate licensed to it by us. If one of our collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators and our reputation in the business and financial communities could be adversely affected.

For our drug candidates other than GMI-1070, we may in the future determine to collaborate with pharmaceutical and biotechnology companies for their development and potential commercialization. We face significant competition in seeking appropriate collaborators. Our ability to reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of a collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a drug candidate, reduce or delay its development 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 fund and undertake development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop our drug candidates or bring them to market, which would impair our business prospects.

We expect to rely on third parties to conduct our future clinical trials for drug candidates other than GMI-1070, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials.

We currently expect to engage a third-party contract research organization, or CRO, to conduct our planned clinical trials for GMI-1271 and any of our other drug candidates that may progress to clinical development. We expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions and clinical investigators, to conduct those clinical trials. Agreements with such third parties might terminate for a variety of reasons, including a failure to perform by the third parties. If we need to enter into alternative arrangements, that would delay our drug development activities.

Our reliance on these third parties for research and development activities will reduce our control over these activities, but will not relieve us of our responsibilities. For example, we will remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with standards, commonly referred to as good clinical practices, or GCPs, for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within specified timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for our drug candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our drug candidates.

We also expect to rely on other third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or marketing approval of our drug candidates or commercialization of our drugs, producing additional losses and depriving us of potential revenue.

We contract with third parties for the manufacturing of our drug candidates for preclinical and clinical testing 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 drug candidates or drugs, or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We do not have any manufacturing facilities or personnel. For our drug candidates other than GMI-1070, for which manufacturing responsibility has shifted to Pfizer, we rely, and expect to continue to rely, on third parties for the manufacturing of our drug candidates for preclinical and clinical testing, as well as for commercial manufacture if any of our drug candidates receive marketing approval. This reliance on third parties increases the risk that we will not have sufficient quantities of our drug candidates or drugs, or such quantities at an acceptable cost or quality,

which could delay, prevent or impair our ability to timely conduct our clinical trials or our other development or commercialization efforts.

We also expect to rely on third-party manufacturers or third-party collaborators for the manufacturing of commercial supply of any other drug candidates for which we or our collaborators obtain marketing approval. We may be unable to establish any agreements with third-party manufacturers or to 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 non-renewal of the agreement by the third party at a time that is costly or inconvenient for us.

Third-party manufacturers may not be able to comply with current good manufacturing practices, or cGMP, regulations or similar regulatory requirements outside the United States. Our failure, or the failure of our third-party manufacturers, to comply with 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 drug candidates or drugs, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our drugs.

Our drug candidates and any drugs that we may develop may compete with other drug candidates and 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. We do not currently have arrangements in place for redundant supply or a second source for bulk drug substance. We are currently manufacturing GMI-1271 through a third party, but the drug supply to treat patients in our planned Phase 1 clinical trial is not yet available and there is no guarantee that it will become available in time for the anticipated start of that trial. If our current contract manufacturers cannot perform as agreed, we may be required to replace such manufacturers and we may incur added costs and delays in identifying and qualifying any such replacement.

Our current and anticipated future dependence upon others for the manufacturing of our drug 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.

Risks Related to the Commercialization of Our Drug Candidates

Even if any of our drug 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 drug 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 drug candidates do not achieve an adequate level of acceptance, we may not generate significant revenue from drug sales and we may not become profitable. The degree of market acceptance of our drug candidates, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and potential advantages compared to alternative treatments;
- our ability to offer our drugs 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 strength of marketing and distribution support;
- the availability of third-party coverage and adequate reimbursement;

- the prevalence and severity of any side effects; and
- any restrictions on the use of our drugs together with other medications.

If we are unable to establish sales, marketing and distribution capabilities for drug candidates other than GMI-1070, we may not be successful in commercializing those drug candidates if and when they are approved.

We do not have a sales or marketing infrastructure and have no experience in the sale, marketing or distribution of pharmaceutical drugs. Under our collaboration with Pfizer, Pfizer is responsible for the commercialization of GMI-1070, our lead drug candidate, if it receives regulatory approval. To achieve commercial success for any other drug candidate for which we may obtain marketing approval, we will need to establish a sales and marketing organization to market or co-promote such drugs. There are risks involved with establishing our own sales, marketing and distribution capabilities. For example, recruiting and training a sales force is expensive and time consuming and could delay any product launch. If the commercial launch of a drug 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 drugs on our own include:

- our inability to recruit, train 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 products; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

If we are unable to establish our own sales, marketing and distribution capabilities and enter into arrangements with third parties to perform these services, our revenue and our profitability, if any, are likely to be lower than if we were to sell, market and distribute any drugs that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell, market and distribute our drug candidates or may be unable to do so 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 drugs effectively. If we do not establish sales, marketing and distribution capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our drug candidates.

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

The development and commercialization of new drugs is highly competitive. We face competition with respect to our current drug candidates, and will face competition with respect to any drug candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies, biotechnology companies, academic institutions, governmental agencies and public and private research institutions.

With respect to GMI-1070, we are not aware of any therapies that have been approved for treatment of patients experiencing VOC. The only drug approved for the prevention of VOC, but not for the resolution of an ongoing VOC episode, is hydroxyurea, which is available in both generic and branded formulations. We are also aware of a company, Mast Therapeutics, Inc., that is developing a drug to treat an ongoing VOC episode. Mast is currently conducting a Phase 3 clinical trial in pediatric patients 8 to 17 years old experiencing VOC. If Mast's drug achieves regulatory approval before GMI-1070, it could adversely affect commercialization of GMI-1070 if it is approved.

In addition to efforts to treat ongoing VOC episodes, we are aware of a number of companies developing therapies intended to prevent VOC from occurring in the first place. One company, Selexys Pharmaceuticals Corporation, is developing a therapy that, like our drug candidates, targets selectins. Selexys has announced that it has commenced enrollment in a Phase 2 clinical trial for its selectin antagonist drug candidate. Other companies are using different approaches to target a variety of biological mechanisms. We are also aware of efforts to develop cures for sickle cell disease through approaches such as bone marrow transplant and gene therapy. If any these approaches are successful and receive regulatory approval, it could limit the market for a drug such as GMI-1070.

In addition, numerous non-profit and non-commercial foundations and interest groups also are committed to improving outcomes for patients with sickle cell disease. Advances in the understanding of the signaling pathways associated with sickle cell disease may lead to further interest and development of treatment options. If an alternative effective treatment or cure for VOC or sickle cell disease receives regulatory approval, the potential commercial success of GMI-1070 could be jeopardized.

With respect to GMI-1271 and its development for treatment of AML and other hematologic cancers, there is substantial potential competition from other therapies currently in development. While some chemotherapies in development for AML could potentially be complementary to GMI-1271, there are also therapies in development that could be directly competitive with GMI-1271. For example, Mozobil, which is currently marketed by Sanofi, is being studied in combination with chemotherapy for the treatment of AML and myeloma. As the treatment landscape for AML changes, there is substantial risk that GMI-1271 might not provide additional benefit over other therapies.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize drugs that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any drugs that we may develop. Our competitors also may obtain FDA or other regulatory approval for their drugs 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.

In addition, because we have no patents with respect to our glycomimetics platform, our competitors may use our methods, or acquire similar expertise, in order to develop glycomimetic drug candidates and progress these drug candidates through clinical development and commercialization, which could impair our ability to successfully commercialize our drug candidates or otherwise limit our commercial opportunities.

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 testing, conducting clinical trials, obtaining regulatory approvals and marketing approved drugs 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 other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These companies 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 or our collaborators are able to commercialize any of our drug candidates, the drugs may become subject to unfavorable pricing regulations, third-party coverage and reimbursement policies or healthcare reform initiatives.

Our and our collaborators' ability to commercialize any of our drug candidates successfully will depend, in part, on the extent to which coverage and adequate reimbursement for these drugs and related treatments will be available from government payor programs at the federal and state levels authorities, including Medicare and Medicaid, private health insurers, managed care plans and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. 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 reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for drugs. Coverage and reimbursement may not be available for any drug that we or our collaborators commercialize and, even if these are available, the level of reimbursement may not be satisfactory. Inadequate reimbursement levels may adversely affect the demand for, or the price of, any drug candidate for which we or our collaborators obtain marketing approval. Obtaining and maintaining adequate reimbursement for our drugs may be difficult. We may be required to conduct expensive pharmacoeconomic studies to justify coverage and reimbursement or the level of reimbursement relative to other therapies. If coverage and adequate reimbursement are not available or reimbursement is available only to limited levels, we or our collaborators may not be able to successfully commercialize any drug candidates for which marketing approval is obtained.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the indications for which the drug is approved by the FDA or similar regulatory authorities outside the United States. Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution expenses. 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. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. Our or our collaborators' inability to promptly obtain coverage and adequate reimbursement rates from both government-funded and private payors for any approved drugs that we develop could adversely affect our operating results, our ability to raise capital needed to commercialize drugs and our overall financial condition.

The regulations that govern marketing approvals, pricing, coverage and reimbursement for new drugs vary widely from country to country. Current and future legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. 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 or licensing 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 or our collaborators might obtain marketing approval for a drug in a particular country, but then be subject to price regulations that delay commercial launch of the drug, possibly for lengthy time periods, and negatively impact our ability to generate revenue from the sale of the drug in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more drug candidates, even if our drug candidates obtain marketing approval.

There can be no assurance that our drug candidates, if they are approved for sale in the United States or in other countries, will be considered medically reasonable and necessary for a specific indication, that they will be considered cost-effective by third-party payors, that coverage or an adequate level of reimbursement will be available or that third-party payors' reimbursement policies will not adversely affect our ability to sell our drug candidates profitably if they are approved for sale.

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

We face an inherent risk of product liability exposure related to the testing of our drug candidates in human clinical trials, and will face an even greater risk if we commercially sell any drugs that we may develop. If we cannot successfully defend ourselves against claims that our drug candidates or drugs caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any drug candidates or drugs 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 paid to trial participants or patients;
- loss of revenue;
- reduced resources of our management to pursue our business strategy; and
- the inability to commercialize any drugs that we may develop.

We currently hold $5.0 million of 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 drug 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 patent protection for our drug candidates, or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize drug candidates similar or identical to ours, and our ability to successfully commercialize our drug candidates may be impaired.

Our success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our drug candidates. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our drug candidates.

The patent prosecution process is expensive and time consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. We may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed to third parties. Therefore, 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. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States, or vice versa. For example, European patent law restricts the patentability of methods of treatment of the human body more than U.S. law does. 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 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 that protect our drug candidates, in whole or in part, or which effectively prevent others from commercializing competitive drug candidates. 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 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, only became effective on March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act 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.

Moreover, we may be subject to a third-party preissuance submission of prior art to the U.S. Patent and Trademark Office, or become involved in opposition, derivation, reexamination, *inter partes* review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our drug candidates and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize drugs without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future drug candidates.

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 patents by developing similar or alternative drug candidates in a non-infringing manner.

In addition, the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or freedom to operate 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 drug candidates, or limit the duration of the patent protection of our drug candidates. Given the amount of time required for the development, testing and regulatory review of new drug candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing drugs similar or identical to ours.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our issued patents or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, 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. 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 need to license intellectual property from third parties, and such licenses may not be available or may not be available on commercially reasonable terms.

A third party may hold intellectual property, including patent, rights that are important or necessary to the development of our drug candidates. It may be necessary for us to use patented or proprietary technology of third parties to commercialize our drug candidates, in which case we would be required to obtain a license from these third parties on commercially reasonable terms, or our business could be harmed, possibly materially.

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.

Our commercial success depends upon our ability, and the ability of our collaborators, to develop, manufacture, market and sell our drug candidates without infringing the proprietary rights of third parties. There is considerable intellectual property litigation in the biotechnology and pharmaceutical industries. We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our drug candidates, including interference or derivation proceedings before the U.S. Patent and Trademark Office. 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 drug candidates. 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 drug. 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 drug candidates or force us to cease some of our business operations. 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 be subject to claims by third parties asserting that we or our employees 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. 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.

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

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. 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 conduct such litigation or proceedings adequately. 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. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace.

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 our drug candidates, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. For example, our platform is based on trade secrets that consist largely of expertise in carbohydrate chemistry and knowledge of carbohydrate biology. We do not believe that we can obtain patent protection for our platform. Thus, our competitors may use our methods, or acquire similar expertise, in order to develop glycomimetic drug candidates and progress these drug candidates through clinical development and commercialization, which could impair our ability to successfully commercialize our drug candidates.

We seek to protect our 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 also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. Despite these efforts, 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 Regulatory Approval of Our Drug Candidates and Other Legal Compliance Matters

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

Our drug candidates and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by the European Medicines Agency, or EMA, and similar regulatory authorities outside the United States.

Failure to obtain marketing approval for a drug candidate will prevent us or our collaborators from commercializing the drug candidate. We have not received approval to market any of our drug candidates from regulatory authorities in any jurisdiction. We have only limited experience in filing and supporting the applications necessary to gain marketing approvals and expect to rely on third-party CROs to assist us in this process for drug candidates other than GMI-1070. Securing marketing approval requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the drug candidate's safety and efficacy. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, applicable regulatory authorities. Our drug 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 ability to obtain marketing approval or prevent or limit commercial use. If any of our drug candidates receives marketing approval, the accompanying label may limit the approved use of our drug, which could limit sales of the drug.

The process of obtaining marketing approvals, both in the United States and abroad, is expensive and may take many years if additional clinical trials are required, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the drug candidates involved. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations or changes in regulatory review for each submitted drug application may cause delays in the approval or rejection of an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application, or may decide that our data is insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a drug candidate. Any marketing approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved drug not commercially viable.

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

Even though we have obtained orphan drug designation for our most advanced drug candidate, GMI-1070, we may not be able to obtain orphan drug marketing exclusivity for this drug candidate or any of our other drug candidates.

Regulatory authorities in some jurisdictions, including the United States and the European Union, or EU, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a drug as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals annually in the United States. We have obtained orphan drug designation from the FDA and the EMA for GMI-1070 for the treatment of VOC, and we may seek orphan drug designation for our other drug candidates. Generally, if a drug with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the drug is entitled to a period of marketing exclusivity, which precludes the FDA or the EMA from approving another marketing application for the same drug for that time period. The applicable period is seven years in the United States and 10 years in the EU. The EU exclusivity period can be reduced to six years if a drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be lost if the FDA or EMA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition.

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

The FDA fast track designation for GMI-1070 may not actually lead to a faster development or regulatory review or approval process.

If a drug is intended for the treatment of a serious or life-threatening disease or condition and the drug demonstrates the potential to address unmet medical needs for this disease or condition, the drug sponsor may apply for FDA fast

track designation. If fast track designation is obtained, the FDA may initiate review of sections of a new drug application, or NDA, before the application is complete. This “rolling review” is available if the applicant provides, and the FDA approves, a schedule for submission of the individual sections of the application.

Although we have obtained a fast track designation from the FDA for GMI-1070 to treat VOC, we may not experience a faster development process, review or approval compared to conventional FDA procedures. Our fast track designation may be withdrawn by the FDA if it believes that the designation is no longer supported by data from our clinical development program. Our fast track designation does not guarantee that we will qualify for or be able to take advantage of the expedited review procedures or that we will ultimately obtain regulatory approval of GMI-1070.

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

In order to market and sell our drugs in the EU and any other jurisdictions, we or our collaborators must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, it is required that the drug be approved for reimbursement before it can be approved for sale in that country. We or our collaborators may not obtain approvals from regulatory authorities outside the United States on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. However, failure to obtain approval in one jurisdiction may impact our ability to obtain approval elsewhere. We or our collaborators may not be able to file for marketing approvals and may not receive necessary approvals to commercialize our drugs in any market.

A variety of risks associated with marketing our drug candidates internationally could hurt our business.

We or our collaborators may seek regulatory approval for GMI-1070 and our other drug candidates outside of the United States and, accordingly, we expect that we will be subject to additional risks related to operating in foreign countries if we obtain the necessary approvals, including:

- differing regulatory requirements in foreign countries;
- the potential for so-called parallel importing, which is what happens when a local seller, faced with high or higher local prices, opts to import goods from a foreign market with low or lower prices rather than buying them locally;
- unexpected changes in tariffs, trade barriers, price and exchange controls and other regulatory requirements;
- economic weakness, including inflation or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations related to doing business in another country;
- difficulties staffing and managing foreign operations;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- potential liability under the Foreign Corrupt Practices Act or comparable foreign regulations;
- challenges enforcing our contractual and intellectual property rights, especially in foreign countries that do not respect and protect intellectual property rights to the same extent as the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geo-political actions, including war and terrorism.

These and other risks associated with our potential international operations may compromise our ability to achieve or maintain profitability.

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

Any drug candidate for which we obtain marketing approval, along with manufacturing processes, post-approval clinical data, labeling, advertising and promotional activities for such drug candidate, will be subject to continual requirements of and review by the FDA and other regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, cGMP requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and recordkeeping. Even if marketing approval of a drug candidate is granted, the approval may be subject to limitations on the indicated uses for which the drug may be marketed or to the conditions of approval, including the requirement to implement a risk evaluation and mitigation strategy. If any of our drug candidates receives marketing approval, the accompanying label may limit the approved use of our drug, which could limit its sales.

The FDA may also impose requirements for costly post-marketing studies or clinical trials and surveillance to monitor the safety or efficacy of the drug. 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 off-label use, and if we do not market our drugs for their approved indications, we may be subject to enforcement action for off-label marketing. 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 laws, as well as state consumer protection laws.

In addition, later discovery of previously unknown adverse events or other problems with our drugs, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may have negative consequences, including:

- restrictions on such drugs, manufacturers or manufacturing processes;
- restrictions on the labeling or marketing of a drug;
- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning letters;
- recall or withdrawal of the drugs from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- clinical holds;
- fines, restitution or disgorgement of revenue or profit;
- suspension or withdrawal of marketing approvals;
- refusal to permit the import or export of our drugs;
- product seizure; or
- injunctions or the imposition of civil or criminal penalties.

Non-compliance with EU requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of drugs for the pediatric population, can also result in significant financial penalties. Similarly, failure to comply with the EU's requirements regarding the protection of personal information can also lead to significant penalties and sanctions.

Our current and future relationships with customers and third-party payors in the United States and elsewhere may be subject, directly or indirectly, to applicable anti-kickback, fraud and abuse, false claims, transparency, health information privacy and security and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any drug 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, including, without limitation, the federal Anti-Kickback Statute and the federal False Claims Act, which may constrain the business or financial arrangements and relationships through which we sell, market and distribute any drugs for which we obtain marketing approval. In addition, we may be subject to transparency laws and patient privacy regulation by the U.S. federal and state governments and by governments in foreign jurisdictions in which we conduct our business. The applicable federal, state and foreign healthcare laws and regulations that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing 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 federal and state healthcare programs, such as Medicare and Medicaid;
- federal civil and criminal false claims laws and civil monetary penalty laws, including the federal False Claims Act, which 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, including the Medicare and Medicaid programs, 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;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, which impose obligations on covered healthcare providers, health plans, and healthcare clearinghouses, as well as their business associates that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- the federal Open Payments program, which requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare & Medicaid Services, or CMS, information related to "payments or other transfers of value" made to physicians, which is defined to include doctors, dentists, optometrists, podiatrists and chiropractors, and teaching hospitals and applicable manufacturers and applicable group purchasing organizations to report annually to CMS ownership and investment interests held by the physicians and their immediate family members, with data collection beginning on August 1, 2013, requirements for manufacturers to submit reports to CMS by March 31, 2014, and the 90th day of each subsequent calendar year, and disclosure of such information to be made by CMS on a publicly available website beginning in September 2014; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers; state and foreign laws that 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 governing 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 may 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, including, without limitation, damages, fines, imprisonment, exclusion from participation in government healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations, which could have a material adverse effect on our business. If any of the physicians or other healthcare providers or entities with whom we expect to do business, including our collaborators, is found not to be in compliance with applicable laws, it may be subject to criminal, civil or administrative sanctions, including exclusions from participation in government healthcare programs, which could also materially affect our business.

Recently enacted and future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our drug 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 approval of our drug candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any drug candidates for which we obtain marketing approval.

Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives. In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively the PPACA, 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 PPACA of importance to our potential drug candidates are:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13.0% of the average manufacturer price for branded and generic drugs, respectively;
- 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 non-compliance;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for a manufacturer's outpatient drugs to be covered under Medicare Part D;
- extension of a manufacturer's Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for certain individuals with income at or below 133% of the federal poverty level beginning in 2014, thereby potentially increasing a manufacturer's Medicaid rebate liability;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- the new requirements under the federal Open Payments program and its implementing regulations;
- 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.

In addition, other legislative changes have been proposed and adopted since the PPACA was enacted. These changes include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. On March 1, 2013, the President signed an executive order implementing the 2% Medicare payment reductions, and on April 1, 2013, these reductions went into effect. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on customers for our drugs, if approved, and, accordingly, our financial operations.

We expect that the PPACA, 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 receive for any approved drug. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our drugs.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for drugs. We cannot be sure whether additional legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our drug candidates, if any, 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 testing and other requirements.

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

In some countries, particularly in the EU, 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 drug. To obtain coverage and reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our drug candidate to other available therapies. If reimbursement of our drugs 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 any 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 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 research, 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 Employee Matters and Managing Our Growth

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

We are highly dependent on the management, research and development, clinical, financial and business development expertise of Rachel King, our President and Chief Executive Officer; John Magnani, our Vice President of Research and Chief Scientific Officer; Helen Thackray, our Vice President of Clinical Development and Chief Medical Officer; and Brian Hahn, our Chief Financial Officer, as well as the other members of our scientific and clinical teams. In particular, we are dependent upon Dr. Magnani for key expertise in carbohydrate chemistry and knowledge of carbohydrate biology with respect to our glycomimetics platform, and the loss of his services would materially impair our future drug discovery efforts. Although we intend to enter into new employment agreements with our executive officers that will be effective upon the completion of this offering, each of them may currently terminate their employment with us at any time and will continue to be able to do so after the completion of this offering. We do not maintain "key person" insurance for any of our executives or employees other than Ms. King and Dr. Magnani.

Recruiting and retaining qualified scientific and clinical personnel and, if we progress the development of our drug pipeline other than GMI-1070 toward scaling up for commercialization, 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, gain regulatory approval for and commercialize our drug candidates. Competition to hire qualified personnel in our industry 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. 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.

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.

As our development progresses, we expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of research, drug development, regulatory affairs and, if any of our drug candidates receives marketing approval, sales, marketing and distribution. To manage our anticipated future growth, 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. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

Our employees may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements.

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include intentional failures to comply with FDA regulations, to provide accurate information to the FDA, to comply with manufacturing standards we have established, to comply with federal and state healthcare fraud and abuse laws and regulations, to report financial information or data accurately or to disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, 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. Employee misconduct could also involve the improper use of individually identifiable information, including, without limitation, information obtained in the

course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. Effective upon the completion of this offering, we will adopt a code of business conduct and ethics, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent improper activities may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

Risks Related to this Offering, Ownership of Our Common Stock and Our Status as a Public Company

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

Prior to this offering, there has been no public market for our common stock. The initial public offering price for our common stock will be determined through negotiations with the underwriters and may not be indicative of the price at which our common stock will trade upon the completion of this offering. Although we intend to apply to list our common stock 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 or is not sustained, it may be difficult for you to sell shares you purchased in this offering at an attractive price, if at all.

The trading price of the shares of our common stock may be volatile, and purchasers of our common stock could incur substantial losses.

Our stock price may be volatile. The stock market in general and the market for biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their common stock at or above the price paid for the shares. The market price for our common stock may be influenced by many factors, including:

- announcements relating to development, regulatory approvals or commercialization of our drug candidates;
- actual or anticipated variations in our operating results;
- changes in financial estimates by us or by any securities analysts who might cover our stock;
- conditions or trends in our industry;
- changes in laws or other regulatory actions affecting us or our industry;
- stock market price and volume fluctuations of comparable companies and, in particular, those that operate in the biopharmaceutical industry;
- announcements by us or our competitors of significant acquisitions, strategic partnerships or divestitures;
- announcements of investigations or regulatory scrutiny of our operations or lawsuits filed against us;
- capital commitments;
- investors' general perception of our company and our business;
- disputes concerning our intellectual property or other proprietary rights;
- recruitment or departure of key personnel; and
- sales of our common stock, including sales by our directors and officers or specific stockholders.

In addition, in the past, stockholders have initiated class action lawsuits against pharmaceutical and biotechnology companies following periods of volatility in the market prices of these companies' stock. Such litigation, if instituted against us, could cause us to incur substantial costs and divert management's attention and resources from our business.

If equity research analysts do not publish research or reports, or publish unfavorable research or reports, about us, our business or our market, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that equity research analysts publish about us and our business. We do not currently have, and may never obtain, research coverage by equity research analysts. Equity research analysts may elect not to provide research coverage of our common stock after the completion of this offering, and such lack of research coverage may adversely affect the market price of our common stock. In the event we do have equity research analyst coverage, we will not have any control over the analysts or the

content and opinions included in their reports. The price of our stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline.

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

We expect the initial public offering price of our common stock to 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 pro forma as adjusted 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 as adjusted net tangible book value per share after this offering and the assumed initial public offering price.

In addition, as of June 30, 2013, we had outstanding stock options to purchase an aggregate of 4,876,698 shares of common stock at a weighted average exercise price of $0.37 per share and warrants to purchase an aggregate of 2,097,625 shares of common stock at a weighted average exercise price of $0.12 per share. To the extent these outstanding options and warrants are exercised, there will be further dilution to investors in this offering.

A significant portion of our total outstanding shares are restricted from immediate resale, but may be sold into the market in the near future. This 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. If our stockholders sell, or if the market perceives that our stockholders intend to sell, substantial amounts of our common stock in the public market following this offering, the market price of our common stock could decline significantly.

Upon the completion of this offering, we will have outstanding shares of common stock, assuming no exercise of outstanding options or warrants. Of these shares, the shares sold in this offering and additional shares will be freely tradable, additional shares of common stock will be eligible for sale in the public market beginning 90 days after the date of this prospectus, subject to volume, manner of sale and other limitations of Rule 144 and Rule 701, and additional shares of common stock will be available for sale in the public market beginning 180 days after the date of this prospectus following the expiration of lock-up agreements between some of our stockholders and the underwriters. The representatives of the underwriters may release these stockholders from their lock-up agreements with the underwriters at any time, which would allow for earlier sales of shares in the public market.

In addition, promptly following the completion of this offering, we intend to file one or more registration statements on Form S-8 registering the issuance of approximately shares of common stock subject to options or other equity awards issued or reserved for future issuance under our equity incentive plans. Shares registered under these registration statements on Form S-8 will be available for sale in the public market subject to vesting arrangements and exercise of options, the lock-up agreements described above and the restrictions of Rule 144 in the case of our affiliates.

Additionally, after this offering, the holders of an aggregate of 33,714,229 shares of our common stock and 2,097,625 shares of our common stock issuable upon the exercise of outstanding warrants, or their transferees, will have rights, subject to some conditions, to require us to file one or more registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. If we were to register the resale of these shares, they could be freely sold in the public market. If these additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

Provisions in our corporate charter documents and under Delaware law may prevent or frustrate attempts by our stockholders to change our management and hinder efforts to acquire a controlling interest in us, and the market price of our common stock may be lower as a result.

There are provisions in our certificate of incorporation and bylaws as they will be in effect following this offering that may make it difficult for a third party to acquire, or attempt to acquire, control of our company, even if a change in control was considered favorable by you and other stockholders. For example, our board of directors will have the

authority to issue up to shares of preferred stock. The board of directors can fix the price, rights, preferences, privileges and restrictions of the preferred stock without any further vote or action by our stockholders. The issuance of shares of preferred stock may delay or prevent a change in control transaction. As a result, the market price of our common stock and the voting and other rights of our stockholders may be adversely affected. An issuance of shares of preferred stock may result in the loss of voting control to other stockholders.

Our charter documents will also contain other provisions that could have an anti-takeover effect, including:

- only one of our three classes of directors will be elected each year;
- stockholders will not be entitled to remove directors other than by a 66 2/3% vote and only for cause;
- stockholders will not be permitted to take actions by written consent;
- stockholders cannot call a special meeting of stockholders; and
- stockholders must give advance notice to nominate directors or submit proposals for consideration at stockholder meetings.

In addition, we are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, which regulates corporate acquisitions by prohibiting Delaware corporations from engaging in specified business combinations with particular stockholders of those companies. These provisions could discourage potential acquisition proposals and could delay or prevent a change in control transaction. They could also have the effect of discouraging others from making tender offers for our common stock, including transactions that may be in your best interests. These provisions may also prevent changes in our management or limit the price that investors are willing to pay for our stock.

Concentration of ownership of our common stock among our existing executive officers, directors and principal stockholders may prevent new investors from influencing significant corporate decisions.

Upon the completion of this offering, our executive officers, directors and current beneficial owners of 5% or more of our common stock and their respective affiliates will, in the aggregate, beneficially own approximately % of our outstanding common stock. Further, funds controlled by one investor, New Enterprise Associates, or NEA, will own % of our common stock. As a result, NEA will be able to control, and these other persons, acting together, will be able to significantly influence, all matters requiring stockholder approval, including the election and removal of directors, any merger, consolidation, sale of all or substantially all of our assets or other significant corporate transactions.

Some of these persons or entities may have interests different than yours. For example, because many of these stockholders purchased their shares at prices substantially below the price at which shares are being sold in this offering and have held their shares for a longer period, they may be more interested in selling our company to an acquirer than other investors, or they may want us to pursue strategies that deviate from the interests of other stockholders.

We are an "emerging growth company," and as a result of the reduced disclosure and governance requirements applicable to emerging growth companies, our common stock may be 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, and we intend to take advantage of some of the exemptions from reporting requirements that are applicable to other public companies that are not emerging growth companies, including:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- 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;
- reduced disclosure obligations regarding executive compensation; and
- not being required to hold a non-binding advisory vote on executive compensation or obtain stockholder approval of any golden parachute payments not previously approved.

We cannot predict if investors will find our common stock less attractive because we will 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. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least $1.0 billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700 million as of the prior June 30th and (2) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

Under Section 107(b) of the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards 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.

If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired.

After the completion of this offering, we will be subject to the reporting requirements of the Securities Exchange Act of 1934, the Sarbanes-Oxley Act and the rules and regulations of The NASDAQ Global Market. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal controls over financial reporting. Commencing with our fiscal year ending December 31, 2014, we must perform system and process evaluation and testing of our internal controls over financial reporting to allow management to report on the effectiveness of our internal controls over financial reporting in our Form 10-K filing for that year, as required by Section 404 of the Sarbanes-Oxley Act. This will require that we incur substantial additional professional fees and internal costs to expand our accounting and finance functions and that we expend significant management efforts. Prior to this offering, we have never been required to test our internal controls within a specified period, and, as a result, we may experience difficulty in meeting these reporting requirements in a timely manner.

We may discover weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our financial statements. Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls, we may not be able to produce timely and accurate financial statements. If that were to happen, the market price of our stock could decline and we could be subject to sanctions or investigations by NASDAQ, the SEC or other regulatory authorities.

We will have broad discretion in the use of proceeds from this offering and may invest or spend the proceeds in ways with which you do not agree and in ways that may not increase the value of your investment.

We will have broad discretion over the use of proceeds from this offering. You may not agree with our decisions, and our use of the proceeds may not yield any return on your investment. We expect to use the net proceeds to us from this offering to conduct clinical trials of GMI-1271, to fund the research and development of our preclinical pipeline, including drug discovery, and for working capital and general corporate purposes. Our failure to apply the net proceeds from this offering effectively could compromise our ability to pursue our growth strategy and we might not be able to yield a significant return, if any, on our investment of these net proceeds. In addition, the net proceeds from this offering may not be sufficient for our anticipated uses, and we may need additional resources to progress our drug candidates to the stage we expect. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering.

Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, will be your sole source of gains and you may never receive a return on your investment.

You should not rely on an investment in our common stock to provide dividend income. We have not declared or paid cash dividends on our common stock to date. We currently intend to retain our future earnings, if any, to fund the

development and growth 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. Investors seeking cash dividends should not purchase our common stock.

We will incur increased costs and demands upon management as a result of being a public company.

As a public company listed in the United States, we will incur significant additional legal, accounting and other costs. These additional costs could negatively affect our financial results. In addition, changing laws, regulations and standards relating to corporate governance and public disclosure, including regulations implemented by the SEC and The NASDAQ Stock Market, may increase legal and financial compliance costs and make some activities more time consuming. These laws, regulations and standards are subject to varying interpretations and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If we do not comply with new laws, regulations and standards, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

Failure to comply with these rules might also make it more difficult for us to obtain some types of insurance, including director and officer liability insurance, and we might be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, on committees of our board of directors or as members of senior management.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. The forward-looking statements are contained principally in the sections entitled “Prospectus Summary,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” but are also contained elsewhere in this prospectus. In some cases, you can identify forward-looking statements by the words “may,” “might,” “will,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “objective,” “anticipate,” “believe,” “estimate,” “predict,” “project,” “potential,” “continue” and “ongoing,” or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain. Forward-looking statements include statements about:

- our plans to develop and commercialize our glycomimetic drug candidates;
- our ability to achieve anticipated milestones under our collaboration with Pfizer for our drug candidate GMI-1070;
- our planned clinical trials for our drug candidate GMI-1271;
- the timing of and our ability to obtain and maintain regulatory approvals for our drug candidates;
- the clinical utility of our drug candidates;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our intellectual property position;
- our ability to identify additional drug candidates with significant commercial potential that are consistent with our commercial objectives; and
- our estimates regarding future revenues, expenses and needs for additional financing.

You should refer to the “Risk Factors” section of this prospectus for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

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. While we believe these industry publications and third party research, surveys and studies are reliable, we have not independently verified such data.

USE OF PROCEEDS

We estimate that the net proceeds from our issuance and sale of shares of our common stock in this offering will be approximately $ million, or approximately $ million if the underwriters exercise their option to purchase additional shares of common stock in full, based upon 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, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Each $1.00 increase or decrease in the 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, would increase or decrease the net proceeds to us from this offering 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 currently estimate that we will use the net proceeds from this offering as follows:

- approximately $ million to conduct planned Phase 1 and Phase 1/2 clinical trials of GMI-1271;
- approximately $ million to fund the research and development of our preclinical pipeline, including drug discovery; and
- the remainder for working capital and other general corporate purposes.

These expected uses represent our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development, the status of and results from clinical trials, as well as any new collaborations that we may enter into with third parties for our drug candidates, and any unforeseen cash needs.

As a result, our management will have broad discretion in the application of the net proceeds from this offering, and investors will be relying on the judgment of our management regarding the application of the net proceeds from this offering. The timing and amount of our actual expenditures will be based on many factors, including cash flows from operations and the anticipated growth of our business. Pending these uses, we plan to invest these net proceeds in short-term, interest bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the United States. The goal with respect to the investment of these net proceeds is capital preservation and liquidity so that such funds are readily available to fund our operations.

DIVIDEND POLICY

We have never declared or paid any dividends on our common stock. We anticipate that we will retain all of our future earnings, if any, for use in the operation and expansion of our business and do not anticipate paying cash dividends in the foreseeable future.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of June 30, 2013:

- on an actual basis;
- on a pro forma basis to give effect to the conversion of the outstanding shares of our convertible preferred stock into an aggregate of 30,726,326 shares of our common stock, which will occur automatically upon the completion of this offering; and
- on a pro forma as adjusted basis to give further effect to our sale of shares of common stock in this offering at 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, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The following information is illustrative only of our cash and capitalization following the completion of this offering, and will change based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the related notes appearing elsewhere in this prospectus.

	AS OF JUNE 30, 2013		
(in thousands, except share and per share data)	ACTUAL	PRO FORMA	PRO FORMA AS ADJUSTED
Cash and cash equivalents	$ 10,778	$ 10,778	$
Stockholders' equity:			
Preferred stock, $0.001 per share; no shares authorized, issued or outstanding, actual or pro forma; shares authorized, no shares issued or outstanding, pro forma as adjusted	$ —	$ —	
Series A-1 convertible preferred stock, $0.001 par value; 60,342,745 shares authorized, 30,726,326 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	31	—	
Common stock, $0.001 par value; 70,258,276 shares authorized, 3,127,693 shares issued and outstanding, actual; shares authorized, 33,854,019 shares issued and outstanding, pro forma; shares authorized, shares issued and outstanding, pro forma as adjusted	3	34	
Additional paid-in-capital	65,401	65,401	
Accumulated deficit	(55,697)	(55,697)	
Total stockholders' equity	9,738	9,738	
Total capitalization	$ 9,738	$ 9,738	$

Each $1.00 increase or decrease in the 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, would increase or decrease the pro forma as adjusted amount of each of cash and cash equivalents, additional paid-in capital, total stockholders' equity and total capitalization 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.

The number of shares of common stock outstanding in the table above does not include:

- 4,876,698 shares of our common stock issuable upon the exercise of stock options outstanding under our 2003 stock incentive plan as of June 30, 2013, at a weighted average exercise price of $0.37 per share;
- 2,097,625 shares of our common stock issuable upon the exercise of warrants outstanding as of June 30, 2013, at a weighted average exercise price of $0.12 per share; and
- shares of our common stock reserved for future issuance under our equity incentive plans.

DILUTION

If you invest in our common stock in this offering, your interest will be diluted to the extent of the difference between the initial public offering price per share and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering. Net tangible book value per share is determined by dividing our total tangible assets less total liabilities by the number of outstanding shares of our common stock.

As of June 30, 2013, we had a net tangible book value of $9.7 million, or $3.11 per share of common stock. On a pro forma basis, after giving effect to the conversion of the outstanding shares of our convertible preferred stock into 30,726,326 shares of our common stock upon the completion of this offering, our net tangible book value would have been $9.7 million, or $0.29 per share of common stock.

Investors participating in this offering will incur immediate and substantial dilution. After giving effect to the issuance and sale of shares of our common stock in this offering at 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, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of June 30, 2013 would have been approximately $ million, or approximately $ per share of common stock. This represents an immediate increase in the pro forma net tangible book value of $ per share to existing stockholders, and an immediate dilution in the pro forma net tangible book value of $ per share to investors purchasing shares of our common stock in this offering. The following table illustrates this per share dilution:

Assumed initial public offering price per share		$
Actual net tangible book value per share as of June 30, 2013	$ 3.11	
Decrease per share attributable to conversion of convertible preferred stock	(2.82)	
Pro forma net tangible book value per share before this offering	0.29	
Increase in pro forma net tangible book value per share attributable to new investors participating in this offering		
Pro forma as adjusted net tangible book value per share after this offering		
Dilution per share to investors participating in this offering		$

The dilution information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each $1.00 increase or decrease in the 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, would increase or decrease our pro forma as adjusted net tangible book value by approximately $ million, or approximately $ per share, and the dilution per share to investors participating in this offering by approximately $ per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same.

If the underwriters exercise their option in full to purchase additional shares of common stock in this offering, the pro forma as adjusted net tangible book value per share after the offering would be $ per share, the increase in the pro forma net tangible book value per share to existing stockholders would be $ per share and the dilution to new investors purchasing common stock in this offering would be $ per share.

The following table sets forth as of June 30, 2013, on the pro forma basis described above, the differences between the number of shares of common stock purchased from us, the total consideration paid and the weighted average price per share paid by existing stockholders and by investors purchasing shares of our common stock in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page on this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us:

	SHARES PURCHASED		TOTAL CONSIDERATION		WEIGHTED AVERAGE PRICE PER SHARE
	NUMBER	PERCENT	AMOUNT	PERCENT	
Existing stockholders	33,854,019	%	$64,104,057	%	$ 1.89
New investors					
Total		100%	$	100%	

Each $1.00 increase or decrease in the 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, would increase or decrease the total consideration paid by new investors by $ million, and increase or decrease the percent of total consideration paid by new investors by percentage points, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same.

The table above also excludes:

- 4,876,698 shares of our common stock issuable upon the exercise of stock options outstanding under our 2003 stock incentive plan as of June 30, 2013, at a weighted average exercise price of $0.37 per share;
- 2,097,625 shares of our common stock issuable upon the exercise of warrants outstanding as of June 30, 2013, at a weighted average exercise price of $0.12 per share; and
- shares of our common stock reserved for future issuance under our equity incentive plans.

The shares of our common stock reserved for future issuance under our equity incentive plans may be subject to automatic annual increases in accordance with the terms of the plans. To the extent that options or warrants are exercised, new options 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 these securities could result in further dilution to our stockholders.

SELECTED FINANCIAL DATA

The following tables set forth selected financial data of GlycoMimetics, Inc. for the periods indicated. The following selected financial data for the years ended December 31, 2011 and 2012 and the selected balance sheet data as of December 31, 2011 and 2012 are derived from our audited financial statements, which have been audited by Ernst & Young LLP, an independent registered public accounting firm, appearing elsewhere in this prospectus. The data should be read together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in conjunction with the financial statements, related notes, and other financial information included elsewhere in this prospectus. The selected statement of operations data for the six months ended June 30, 2012 and 2013 and for the period from May 21, 2003 (date of inception) through June 30, 2013 and the selected balance sheet data as of June 30, 2013 are derived from unaudited financial statements appearing elsewhere in this prospectus.

The unaudited financial statements include all adjustments, consisting of normal recurring accruals, that management considers necessary for a fair presentation of the financial position and the results of operations for these periods. Our historical results are not necessarily indicative of the results to be expected in the future, and our operating results for the six months ended June 30, 2013 are not necessarily indicative of the results that may be expected for the entire year ending December 31, 2013.

(in thousands, except share and per share data)	YEAR ENDED DECEMBER 31, 2011	YEAR ENDED DECEMBER 31, 2012	SIX MONTHS ENDED JUNE 30, 2012	SIX MONTHS ENDED JUNE 30, 2013	PERIOD FROM MAY 21, 2003 (DATE OF INCEPTION) TO JUNE 30, 2013
Statement of Operations Data:					
Revenue	$ 3,814	$ 15,257	$ 7,542	$ 3,863	$ 23,465
Costs and expenses:					
Research and development	7,799	9,438	4,256	5,624	64,723
General and administrative	2,100	2,157	1,090	1,263	14,233
Total costs and expenses	9,899	11,595	5,346	6,887	78,956
Income (loss) from operations	(6,085)	3,662	2,196	(3,024)	(55,491)
Other income (expense):					
Interest income (expense), net	8	21	12	1	(172)
Other expense, net	(36)	(27)	(13)	(4)	(34)
Total other expense	(28)	(6)	(1)	(3)	(206)
Net income (loss)	$ (6,113)	$ 3,656	$ 2,195	$ (3,027)	$ (55,697)
Net income (loss) per share of common stock—basic	$ (1.99)	$ 1.19	$ 0.72	$ (0.98)	
Net income (loss) per share of common stock—diluted	$ (1.99)	$ 0.10	$ 0.06	$ (0.98)	
Weighted average shares outstanding, basic	3,066,253	3,069,603	3,069,603	3,095,925	
Weighted average shares outstanding, diluted	3,066,253	36,376,589	36,383,159	3,095,925	
Pro forma net income (loss) per share—basic		$ 0.11		$ (0.09)	
Pro forma net income (loss) per share—diluted		$ 0.10		$ (0.09)	
Pro forma weighted average shares outstanding—basic		33,795,929		33,822,251	
Pro forma weighted average shares outstanding—diluted		36,376,589		33,822,251	

(in thousands)	AS OF DECEMBER 31, 2011	AS OF DECEMBER 31, 2012	AS OF JUNE 30, 2013
Balance Sheet Data:			
Cash and cash equivalents	$28,172	$17,373	$10,778
Total assets	28,909	18,420	11,554
Total liabilities	20,452	5,891	1,815
Total stockholders' equity	8,457	12,528	9,738

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 our financial statements and the related notes and other financial information included elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should review the "Risk Factors" section of this prospectus for a discussion of important factors that could cause actual results to 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 biotechnology company focused on the discovery and development of novel glycomimetic drugs to address unmet medical needs resulting from diseases in which carbohydrate biology plays a key role. Glycomimetics are molecules that mimic the structure of carbohydrates involved in important biological processes. Using our expertise in carbohydrate chemistry and knowledge of carbohydrate biology, we are developing a pipeline of proprietary glycomimetics that inhibit disease-related functions of carbohydrates, such as the roles they play in inflammation, cancer and infection. We believe this represents an innovative approach to drug discovery to treat a wide range of diseases.

We are focusing our initial efforts on drug candidates for rare diseases that we believe will qualify for orphan drug designation. We are developing our lead drug candidate, GMI-1070, for the treatment of VOC. In October 2011, we entered into a license agreement with Pfizer under which we were responsible for the clinical development of GMI-1070 through the completion of a Phase 2 clinical trial. Following our completion of the Phase 2 clinical trial in April 2013, Pfizer is now responsible for all further clinical development, regulatory approval and potential commercialization of GMI-1070 for all indications and Pfizer has commercial rights to GMI-1070 worldwide.

Building on our experience with GMI-1070, we are developing a pipeline of other glycomimetic drug candidates. Our second most advanced drug candidate, GMI-1271, is a specific E-selectin inhibitor, which we are developing to be used in combination with chemotherapy to treat patients with acute myeloid leukemia, or AML, and potentially other hematologic cancers. We are also developing a pipeline of other preclinical drug candidates based on our expertise in carbohydrate chemistry. We have retained the worldwide development and commercialization rights to all of our drug candidates other than GMI-1070.

We commenced operations in 2003, and our operations to date have been limited to organizing and staffing our company, business planning, raising capital, developing our glycomimetics platform, identifying potential drug candidates, undertaking preclinical studies and, beginning in 2008, conducting clinical trials of GMI-1070. To date, we have financed our operations primarily through private placements of our securities and an upfront payment that we received in 2011 under our collaboration with Pfizer. We have no products currently available for sale, and substantially all of our revenue to date has been revenue from the upfront payment from Pfizer, although we have received nominal amounts of revenue under research grants. Since our inception and through June 30, 2013, we have raised an aggregate of $86.6 million to fund our operations, of which $22.5 million was an upfront payment under our collaboration with Pfizer and $64.1 million was from the sale of our convertible promissory notes and convertible preferred stock.

Since inception, we have incurred significant operating losses. Although we generated net income of $3.7 million in 2012 as a result of recognizing $15.0 million of the $22.5 million upfront payment Pfizer made to us when we entered into our agreement with them as revenue during the year, our net loss was $3.0 million for the six months ended June 30, 2013, and we expect to continue to incur significant expenses and operating losses over at least the next several years. As of June 30, 2013, we had an accumulated deficit of $55.7 million. Our net losses may fluctuate significantly from quarter to quarter and year to year, depending on the timing of our clinical trials, the

receipt of milestone payments, if any, under our collaboration with Pfizer, and our expenditures on other research and development activities. We anticipate that our expenses will increase substantially as we:

- prepare to file an IND and then initiate our planned Phase 1 and Phase 1/2 clinical trials of GMI-1271, beginning in 2014;
- continue the research and development of our other drug candidates;
- seek to discover and develop additional drug candidates;
- seek regulatory approvals for any drug candidates other than GMI-1070 that successfully complete clinical trials;
- ultimately establish a sales, marketing and distribution infrastructure and scale up external manufacturing capabilities to commercialize any drug candidates other than GMI-1070 for which we may obtain regulatory approval;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, quality control and scientific personnel; and
- add operational, financial and management information systems and personnel, including personnel to support our drug development and potential future commercialization efforts.

To fund further operations, we will need to raise capital in addition to the net proceeds from this offering. We may obtain additional financing in the future through the issuance of our common stock, through other equity or debt financings or through collaborations or partnerships with other companies. We may not be able to raise additional capital on terms acceptable to us, or at all, and any failure to raise capital as and when needed could compromise our ability to execute on our business plan. Although it is difficult to predict future liquidity requirements, we believe that the net proceeds from this offering and our existing cash and cash equivalents, together with interest thereon, will be sufficient to fund our operations for at least the next 12 months. However, our ability to successfully transition to profitability will be dependent upon achieving a level of revenues adequate to support our cost structure. We cannot assure you that we will ever be profitable or generate positive cash flow from operating activities.

Our Collaboration with Pfizer

In October 2011, we entered into the license agreement with Pfizer under which we granted Pfizer an exclusive worldwide license to develop and commercialize products containing GMI-1070 for all fields and uses. The license also covers specified back-up compounds along with modifications of and improvements to GMI-1070 that meet defined chemical properties. Pfizer is required to use commercially reasonable efforts, at its expense, to develop, obtain regulatory approval for and commercialize GMI-1070 for sickle cell disease in the United States. Under the terms of the agreement, we received a $22.5 million upfront payment and are eligible to earn up to $320.0 million in development, regulatory and commercial milestones. We are also eligible to receive tiered, low double-digit royalties for each licensed product based on net sales worldwide, subject to reductions in specified circumstances.

The first potential milestone payment that we might be entitled to receive under the Pfizer agreement is $35.0 million upon the initiation of dosing of the first patient in a Phase 3 trial of GMI-1070 by Pfizer. In some specified circumstances, if Pfizer has not initiated dosing by April 2014, Pfizer is obligated to make an advance payment to us of $15.0 million against the first milestone payment.

Pfizer has advised us through the joint steering committee established under the agreement that they intend to begin enrolling patients for a Phase 3 trial of GMI-1070 in mid-2014, pending approval through Pfizer’s governance process. Pfizer has also informed us through the joint steering committee that activities necessary to support the initiation of a Phase 3 trial in mid-2014 are currently underway pending approval through Pfizer’s governance process. The steps that Pfizer has taken and is taking to prepare for a Phase 3 trial include manufacturing of the drug substance to be used in the Phase 3 trial, completion of toxicology studies that would support a Phase 3 trial and an NDA, engagement with regulatory authorities in the United States and overseas to discuss plans for the conduct of a Phase 3 trial, planning and preparation for a so-called TQTc clinical trial to evaluate cardiac safety that would support a Phase 3 trial, contracting with a CRO to provide services in the conduct of a Phase 3 trial and convening clinical investigators in the United States and overseas to discuss plans for a Phase 3 trial.

Although Pfizer has taken and is taking a number of steps to prepare for Phase 3 initiation in mid-2014, there can be no assurance that Pfizer will proceed on that schedule, or at all. There also can be no assurance that, if Pfizer does not initiate dosing by April 2014, the conditions to its obligation to make the $35.0 million milestone payment or the $15.0 million advance will be satisfied.

We have a research agreement with the University of Basel, or the University, under which University personnel have performed research services for us on an as-requested basis since 2004. As part of the original consideration for entering into this agreement, we granted to the University the right to receive payments from us under specified circumstances. If we receive any future milestone payments or royalties from Pfizer with respect to GMI-1070, we have agreed to pay 10% of those amounts to the University.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of these financial statements requires us to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities as of the dates of the balance sheets and the reported amounts of revenue and expenses during the reporting periods. In accordance with GAAP, we base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances at the time such estimates are made. Actual results may differ materially from our estimates and judgments under different assumptions or conditions. We periodically review our estimates in light of changes in circumstances, facts and experience. The effects of material revisions in estimates are reflected in our financial statements prospectively from the date of the change in estimate.

We define our critical accounting policies as those accounting principles generally accepted in the United States that require us to make subjective estimates and judgments about matters that are uncertain and are likely to have a material impact on our financial condition and results of operations, as well as the specific manner in which we apply those principles. While our significant accounting policies are more fully described in Note 2 to our financial statements appearing elsewhere in this prospectus, we believe the following are the critical accounting policies used in the preparation of our financial statements that require significant estimates and judgments.

Revenue Recognition

Research Grant Contracts

From time to time, we are awarded reimbursement contracts for services and development grant contracts with government and non-government entities and philanthropic organizations. Under these contracts, we are typically reimbursed for our costs in connection with specific research or development activities. We recognize revenue as and to the extent we incur costs in connection with performance under these arrangements.

License and Collaboration Agreements

We have entered into a license agreement with Pfizer. Under the agreement, Pfizer made a nonrefundable $22.5 million upfront payment to us in 2011 and may become obligated to make potential milestone payments to us upon the achievement of significant clinical development milestones, regulatory approvals and sales-based events. The agreement also contemplates royalty payments to us on any future net sales of GMI-1070 worldwide.

Collaborative research and development agreements can provide for one or more of upfront license fees, research payments and milestone payments. Agreements with multiple components, such as deliverables or similar items, are referred to as multi-element revenue arrangements and are evaluated according to the provisions of Accounting Standards Codification, or ASC, Topic 605-25, *Revenue Recognition—Multiple-Element Arrangements*, which we adopted effective as of January 1, 2011, to determine whether the deliverables can be separated into more than one unit of accounting. An item can generally be considered to be a separate unit of accounting if both of the following criteria are met:

- the delivered item(s) has value to our customer on a standalone basis; and
- the arrangement includes a general right of return relative to the delivered item(s), and delivery or performance of the undelivered item(s) is considered probable and substantially in our control.

Items that cannot be divided into separate units are combined with other units of accounting, as appropriate. Consideration received is then allocated among the separate units based on a selling price hierarchy. The selling price hierarchy for each deliverable is based on vendor-specific objective evidence, or VSOE, if it is available; third-party evidence of selling price, or TPE, if VSOE is not available; or an estimated selling price, if neither VSOE nor TPE is available.

Our license agreement with Pfizer represents a multiple-element revenue arrangement. To account for this transaction, we determined the elements, or deliverables, included in the arrangement and allocated arrangement consideration to the various elements based on each element's relative selling price. The identification of individual elements in a multiple-element arrangement and the estimation of the selling price of each element involve significant judgment, including consideration as to whether each delivered element has standalone value to our collaborator.

The primary deliverable under our license arrangement with Pfizer is an exclusive worldwide license to GMI-1070, which is currently being developed to treat people experiencing VOC. The arrangement also includes deliverables related to research and preclinical development activities to be performed by us on Pfizer's behalf and our participation on a joint steering committee. We concluded that these deliverables should be accounted for as a single unit of accounting, and we therefore determined to recognize the upfront payment of $22.5 million as revenue over the expected development period of 1.5 years, which was the period over which we expected to provide our research and development services and participate on the joint steering committee under the arrangement. Our determination of the appropriate length of the period over which to recognize revenue was consistent with the research plan agreed to with Pfizer.

In reaching this conclusion, we evaluated whether the license to GMI-1070 has standalone value to Pfizer. Factors we considered in determining whether the license has standalone value included whether or not Pfizer can use the license for its intended purpose without the receipt of the remaining deliverables, the value of the license without the undelivered items, Pfizer's or other vendors' ability to provide the undelivered items, the proprietary nature of the license and know-how, and the availability of our glycomimetics expertise in the general marketplace. Based on all relevant facts and circumstances and, most significantly, on the proprietary nature of our platform and the related proprietary nature of our research services, we concluded that standalone value does not exist for the license and, therefore, the license is not a separate unit of accounting under the collaboration and should be combined with the research and development services we are obligated to provide, including our participation on the joint steering committee.

We also evaluated whether our participation on the joint steering committee is a substantive obligation and therefore a separate unit of accounting. The joint steering committee is responsible for overseeing the general working relationships, determining the protocols to be followed in the research and development performed and evaluating the results from the continued development of the drug candidate. The factors we considered in determining if our participation on the joint steering committee is a substantive obligation included:

- which party negotiated or requested the steering committee;
- how frequently the steering committee meets;
- whether or not there are any penalties or other recourse if we do not attend the steering committee meetings;
- which party has decision-making authority on the steering committee; and
- whether or not Pfizer has the requisite experience and expertise associated with the research and development of GMI-1070.

We considered that we may terminate our participation on the joint steering committee at any point during the agreement. Further, the estimated selling price of our obligation was not material to the overall license agreement. Based on all relevant facts and circumstances, we concluded that our participation on the joint steering committee is not a substantive obligation and, therefore, is not a separate unit of accounting under the collaboration.

We were not able to establish VSOE or TPE for the separate unit deliverables under the arrangement with Pfizer, as we do not have a history of entering into such arrangements or selling the individual deliverables within such arrangements separately. Accordingly, we determined that the selling price for the deliverables under the Pfizer

license agreement should be determined using the best estimate of selling price. The process of determining the best estimate of selling price involved significant judgment on our part and included consideration of multiple factors, including market conditions and company-specific factors, such as those factors contemplated in negotiating the agreement and internally developed models that included assumptions related to market opportunity, discounted cash flows, estimated development costs, probability of success and the time needed to commercialize a drug candidate pursuant to the license. In validating the best estimate of selling price, we considered whether changes in key assumptions used to determine the best estimate of selling price would have a significant effect on the allocation of the arrangement consideration between the multiple deliverables.

Our license agreement with Pfizer also includes contingent milestone payments related to specified development, regulatory and commercial milestones. We adopted ASC Topic 605-28, *Revenue Recognition—Milestone Method*, effective as of January 1, 2011. Under this guidance, we may recognize revenue contingent upon the achievement of a substantive milestone in its entirety in the period the milestone is achieved. Milestones are considered substantive if all of the following conditions are met:

- the milestone is nonrefundable;
- achievement of the milestone was not reasonably assured at the inception of the arrangement;
- substantive effort is involved to achieve the milestone;
- the amount of the milestone appears reasonable in relation to the effort expended or the risk associated with achievement of the milestone; and
- a reasonable amount of time passes between the upfront license payment and the first milestone payment, as well as between each subsequent milestone payment.

Our determination as to whether a payment meets these five conditions involves management's judgment. If any of these conditions are not met, the resulting payment would not be considered a substantive milestone and would instead be considered part of the consideration for the single unit of accounting. In addition, if we determine that one milestone is not substantive, it could prevent us from concluding that subsequent milestones are substantive and, as a result, any additional milestone payments could also be considered part of the consideration for the single unit of accounting and would be recognized as revenue as those performance obligations are performed under either the proportional performance method or the straight-line method.

We have evaluated whether each milestone under the Pfizer arrangement is substantive and at risk to both parties on the basis of the contingent nature of that milestone. This evaluation included an assessment of whether:

- the consideration is commensurate with either our performance to achieve the milestone or the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from our performance to achieve the milestone;
- the consideration relates solely to past performance; and
- the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement.

Based on this evaluation, we concluded that the milestones under the Pfizer collaboration are substantive, due to the uncertainty of future clinical development success and the additional effort and time that is expected before the milestones could be achieved. Accordingly, each milestone will be recognized as revenue upon its achievement, assuming all other revenue recognition criteria are met.

Stock-Based Compensation

We issue stock-based compensation awards to our employees and non-employee directors, including stock options. We measure stock-based compensation expense related to these awards based on the fair value of the award on the date of grant and recognize stock-based compensation expense, less estimated forfeitures, on a straight-line basis over the requisite service period of the awards, which generally equals the vesting period. We have selected the Black-Scholes option pricing model to determine the fair value of stock option awards, which requires the input of various assumptions that require management to apply judgment and make assumptions and estimates, including:

- the expected life of the stock option award;
- the expected volatility of the underlying common stock; and
- the fair value of our common stock determined on the date of grant.

The following table summarizes the assumptions we used for estimating the fair value of stock options granted to employees for the periods indicated:

	YEAR ENDED DECEMBER 31,		SIX MONTHS ENDED JUNE 30,	
	2011	2012	2012	2013
Risk-free interest rate	1.31%	0.60%	0.60%	0.56%
Expected life of option term	6.25 years	6.25 years	6.25 years	6.25 years
Volatility	102.41%	94.77%	94.77%	78.07%
Estimated dividend yield	0%	0%	0%	0%
Weighted average grant date fair value	$0.27	$0.46	$0.46	$0.76

We have assumed no dividend yield because we do not expect to pay dividends in the future, which is consistent with our history of not paying dividends. The risk-free interest rate assumption is based on observed interest rates for constant maturity U.S. Treasury securities consistent with the expected life of our employee stock options. The expected life represents the period of time the stock options are expected to be outstanding and is based on the simplified method. Under the simplified method, the expected life of an option is presumed to be the midpoint between the vesting date and the end of the contractual term. We used the simplified method due to the lack of sufficient historical exercise data to provide a reasonable basis upon which to otherwise estimate the expected life of the stock options. Expected volatility is based on the historical volatilities of a peer group of comparable publicly traded companies with drug candidates in similar stages of development.

The amount of stock-based compensation expense recognized during a period is based on the value of the portion of the awards that are ultimately expected to vest. Our estimate of pre-vesting forfeitures, or forfeiture rate, is based on our analysis of historical behavior by stock option holders. The estimated forfeiture rate is applied to the total estimated fair value of the awards, as derived from the Black-Scholes model, to compute the stock-based compensation expense, net of pre-vesting forfeitures, to be recognized in our statements of operations. We estimate forfeitures for employee grants at the time of grant and revise the estimates, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

Our assumptions for a particular period may differ from those used in prior periods, and changes in the assumptions may have a significant impact on the fair value of future equity awards, which could have a material impact on our consolidated financial statements. We grant stock options with exercise prices equal to the estimated fair value of our common stock on the date of grant.

The following table summarizes, by grant date, the number of shares of common stock subject to stock options granted from January 1, 2012 through the date of this prospectus, as well as the associated per share exercise price and the estimated fair value per share of our common stock on the grant date.

GRANT DATE	NUMBER OF SHARES UNDERLYING OPTIONS GRANTED	EXERCISE PRICE PER SHARE	ESTIMATED FAIR VALUE PER SHARE	PER SHARE GRANT DATE INTRINSIC VALUE PER OPTION
March 20, 2012	247,885	$ 0.60	$ 0.60	$ —
July 17, 2012	121,850	0.60	0.60	—
December 19, 2012	81,250	0.60	0.60	—
April 9, 2013	30,700	1.13	1.13	—

Determination of the Fair Value of Common Stock on Grant Dates

We are a private company with no active public market for our common stock. Therefore, we have periodically determined for financial reporting purposes the estimated per share fair value of our common stock at various dates using contemporaneous valuations performed in accordance with the guidance outlined in the American Institute of

Certified Public Accountants Practice Aid, *Valuation of Privately-Held Company Equity Securities Issued as Compensation*, also known as the Practice Aid. We performed these contemporaneous valuations as of January 1, 2012 and April 1, 2013. In conducting the contemporaneous valuations, we considered all objective and subjective factors that we believed to be relevant for each valuation conducted, including our best estimate of our business condition, prospects and operating performance at each valuation date. Within the contemporaneous valuations performed, a range of factors, assumptions and methodologies were used. The significant factors included:

- our results of operations, financial position and the status of research and development efforts;
- the composition of, and changes to, our management team and board of directors;
- the lack of liquidity of our common stock as a private company;
- our stage of development and business strategy and the material risks related to our business and industry;
- our discounted future cash flows, based on our projected operating results;
- the potential impact on our common stock of liquidation preference rights of our convertible preferred stock;
- the achievement of enterprise milestones, including entering into collaboration and license agreements;
- the valuation of publicly traded companies in the life sciences and biotechnology industries, as well as recently completed mergers and acquisitions of peer companies;
- any external market conditions affecting the life sciences and biotechnology industries;
- the likelihood of achieving a liquidity event for the holders of our common stock and stock options, such as an initial public offering, or IPO, or a sale of our company, given prevailing market conditions;
- the state of the IPO market for similarly situated privately held biotechnology companies; and
- any recent contemporaneous valuations prepared in accordance with methodologies outlined in the Practice Aid.

The dates of our contemporaneous valuations have not always coincided with the dates of our stock-based compensation grants. In determining the exercise prices of the stock options granted, our board of directors considered, among other things, the most recent contemporaneous valuations of our common stock and our assessment of additional objective and subjective factors we believed were relevant as of the grant date. The additional factors considered when determining any changes in fair value between the most recent contemporaneous valuation and the grant dates included, when available, the prices paid in recent transactions involving our equity securities, as well as our stage of development, our operating and financial performance and current business conditions.

There are significant judgments and estimates inherent in the determination of fair value of our common stock, including the contemporaneous valuations. These judgments and estimates include assumptions regarding our future operating performance, the time to completing an IPO or other liquidity event and the determinations of the appropriate valuation methods. If we had made different assumptions, our stock-based compensation expense, net income (loss) and net income (loss) per common share could have been significantly different.

Common Stock Valuation Methodologies

The Practice Aid describes market, income and cost approaches to valuing equity securities, each of which approaches is summarized below.

Market Approach

The market approach uses similar companies or transactions in the marketplace. When using the guideline company method of the market approach in determining the fair value of common stock, a company identifies companies similar to its business and uses these guideline companies to develop relevant market multiples and ratios, which are then applied to its financial forecasts to create an indication of total equity value. When using the similar transaction methodology of the market approach in determining the fair value of common stock, a company uses publicly disclosed data from arm's-length transactions involving similar companies to develop relationships or value measures between the prices paid for the target companies and the underlying financial performance of those companies. These value measures are then applied to a company's applicable operating data to create an indication of total equity value.

Income Approach

For the income approach, a company typically uses the discounted free cash flow method, which is based on the premise that equity value as of the respective valuation date is equal to the projected future free cash flows and expected terminal value of the business, discounted by a required rate of return that investors would demand given the risks of ownership and the risks associated with achieving the stream of projected future free cash flows.

Cost Approach

The cost approach involves identifying a company's significant tangible assets, estimating the individual current market values of each and then totaling them to derive the value of the business as a whole. A company can use the cost approach to value its adjusted net assets available to common stockholders if it were forced to liquidate its assets if its business model failed and the company was unable to raise additional financing.

Based on our stage of development, as described by the Practice Aid, and the fact that we had not raised any financing since October 2009, we exclusively used the income approach in determining the fair value of our common stock as of each grant date.

Methods Used to Allocate Our Enterprise Value to Classes of Securities

In accordance with the Practice Aid, we considered the various methods for allocating the enterprise value across our classes and series of capital stock to determine the fair value of our common stock at each valuation date. The methods we considered consisted of:

Current Value Method

Under the current value method, once the fair value of the enterprise is established, the value is allocated to the various series of preferred and common stock based on their respective seniority, liquidation preferences or conversion values, whichever is greatest.

Option Pricing Method

Under the option pricing method, or OPM, shares are valued by creating a series of theoretical call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The values of the preferred and common stock are inferred by analyzing these options.

Probability-Weighted Expected Return Method

The probability-weighted expected return method, or PWERM, is a scenario-based analysis that estimates the value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class.

For each of the contemporaneous valuations described below, we used the OPM to determine the estimated fair value of our common stock.

January 1, 2012 Valuation

In October 2011, we entered into our collaboration with Pfizer and, in light of the significance of that transaction, deemed it appropriate to obtain a contemporaneous valuation of our common stock as of January 1, 2012. Because we had detailed financial projections available that were based on assumptions in light of the Pfizer transaction and the potential milestone payments we might receive under that arrangement, we used those projections to estimate our future cash flows. We then discounted those projected cash flows back to their present value, using an assumed risk-adjusted cost of capital of approximately 22%, to estimate our enterprise value.

We then allocated the estimated enterprise value to the classes of our capital stock using the OPM. The OPM used in this analysis assumed a time to liquidity event of between three and four years. The OPM also assumed an annual volatility rate of between 78% and 88% for the various estimates of time to liquidity. Our estimates of volatility were based on historical stock price trading data for a group of seven biotechnology companies we considered comparable to us.

Using the OPM, we estimated that the fully marketable, minority basis value of the common stock was between $0.86 and $0.90 per share. We then applied a discount for lack of marketability, or DLOM, of between 31% and 39% for the various estimates of time to a liquidity event. This DLOM was determined based on an Asian/average protective put option analysis. Based on this methodology, we concluded that our common stock had a fair value of $0.60 per share as of January 1, 2012.

2012 Option Grants

Our board of directors granted options to purchase common stock on March 20, 2012, July 17, 2012 and December 19, 2012, with each option having an exercise price of $0.60 per share. In establishing this exercise price, our board of directors considered input from management, including the valuation we conducted of our common stock as of January 1, 2012, as well as the objective and subjective factors outlined above. At each grant date, our board of directors considered the events and circumstances most likely to affect the value of our common stock that occurred between January 2012 and the grant date, and whether those events and circumstances were part of the assumptions used in the January 2012 valuation. Our board of directors concluded that there were no events or circumstances that occurred between January 2012 and December 2012 that were indicative of a significant change in the fair value of our common stock. During the year, we continued to make progress on our Phase 2 clinical trial of GMI-1070, but we did not complete enrollment of patients in this trial until January 2013. Based on these factors, our board of directors determined that the fair value of our common stock at each grant date during 2012 was $0.60 per share.

April 1, 2013 Valuation

In April 2013, we completed our Phase 2 clinical trial of GMI-1070 and announced top-line results. In light of the significance of that development, we deemed it appropriate to obtain a contemporaneous valuation of our common stock as of April 1, 2013. In this valuation, we used the same methodology as we had used for our January 1, 2012 valuation, but with updated assumptions based upon the completion of the Phase 2 clinical trial. We continued to apply an assumed risk-adjusted cost of capital of approximately 22% to our projected cash flows in order to estimate our enterprise value.

We then allocated the estimated enterprise value to the classes of our capital stock using the OPM. The OPM used in this analysis assumed a time to liquidity event of between 1.5 and 2.9 years. The OPM also assumed an annual volatility rate of between 69% and 71% for the estimates of time to liquidity. Our estimates of volatility were based on historical stock price trading data for the same group of seven biotechnology companies we considered comparable to us in our January 1, 2012 valuation.

Using the OPM, we estimated that the fully marketable, minority basis value of the common stock was between $1.48 and $1.51 per share. We then applied a DLOM of between 20% and 28% for the various estimates of time to a liquidity event. We lowered the DLOM from that used in the prior valuation because we believed that we were moving closer to a potential liquidity event. Based on this methodology, we concluded that our common stock had a fair value of $1.13 per share as of April 1, 2013. The primary reason for the increase in the estimated fair value of our common stock from January 1, 2012 to April 1, 2013 was the increased probability of receiving milestone payments under our Pfizer collaboration as a result of having completed the Phase 2 clinical trial.

2013 Option Grants

Our board of directors granted options to purchase common stock on April 9, 2013, with each option having an exercise price of $1.13 per share. In establishing this exercise price, our board of directors considered input from management, giving substantial weight to the valuation we conducted of our common stock as of April 1, 2013. Our board of directors concluded that there were no events or circumstances that occurred between April 1, 2013 and April 9, 2013 that were indicative of a change in the fair value of our common stock and therefore determined that the fair value of our common stock on that grant date was $1.13 per share.

Determination of Estimated Offering Price

In July 2013, we selected underwriters for this offering. The midpoint of the preliminary range for this offering as determined by us and the underwriters was $ per share. In comparison, our estimate of the fair value of our common stock was $1.13 per share as of the April 1, 2013 valuation. We note that, as is typical in IPOs, the preliminary range was not derived using a formal determination of fair value, but was determined based upon discussions between us and the underwriters. Among the factors that were considered in setting this range were our prospects and the history of and prospects for our industry, the general condition of the securities markets and the recent market prices of, and the demand for, publicly traded common stock of comparable companies.

We believe that the difference between the fair value of our common stock as of April 1, 2013 and the midpoint of the estimated price range for this offering is the result of these factors as well as the fact that the estimated IPO price range necessarily assumes that the IPO has occurred, a public market for our common stock has been created

and our preferred stock has converted into common stock in connection with the IPO. The estimated IPO price range therefore excludes any DLOM of our common stock and any consideration of the preferences of our convertible preferred stock, which we factored into the April 1, 2013 contemporaneous valuation. In addition, since the time of the April 1, 2013 valuation, Pfizer has informed us through the joint steering committee that additional activities necessary to support the initiation of the Phase 3 clinical trial in mid-2014 are currently underway, pending approval through Pfizer's governance process. During this period, we have also had further conversations with the FDA regarding our development plans for GMI-1070, and we have progressed our plans for the development of GMI-1271, including generation of additional supportive preclinical data.

Research and Development Expenses

Research and development costs are charged to expense as incurred and include employee-related expenses, including salaries, benefits and travel, expenses incurred under agreements with CROs and investigative sites that conduct preclinical studies and clinical trials, as well as the cost of acquiring, developing and manufacturing clinical trial materials, facilities, depreciation and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance and other supplies and costs associated with preclinical activities and regulatory operations.

We record costs for some development activities, such as clinical trials, based on our evaluation of the progress to completion of specific tasks using data such as patient enrollment, clinical site activations, or information provided to us by our vendors on their actual costs incurred. Payments for these activities are based on the terms of the individual arrangements, which may differ from the pattern of costs incurred, and are reflected in the financial statements as prepaid or accrued research and development expense, as the case may be.

Income Taxes

We recorded deferred tax assets of $22.7 million as of December 31, 2012, which have been fully offset by a valuation allowance due to uncertainties surrounding our ability to realize these tax benefits. The deferred tax assets are primarily composed of federal and state tax net operating loss, or NOL, carryforwards and research and development tax credit carryforwards. As of December 31, 2012, we had federal NOL carryforwards of $11.4 million, state NOL carryforwards of $1.8 million and research and development tax credit carryforwards of $3.3 million available to reduce future taxable income, if any. Our federal and state NOL carryforwards will begin to expire at various dates starting in 2023. In general, if we experience a greater than 50 percentage point aggregate change in ownership of specified significant stockholders over a three-year period, utilization of our pre-change NOL carryforwards will be subject to an annual limitation under Section 382 of the U.S. Internal Revenue Code of 1986, as amended, and similar state laws. Such limitations may result in expiration of a portion of the NOL carryforwards before utilization and may be substantial. If we experience a Section 382 ownership change in connection with this offering or as a result of future changes in our stock ownership, some of which changes are outside our control, the tax benefits related to the NOL carryforwards may be further limited or lost.

Components of Operating Results

Revenue

To date, we have not generated any revenue from product sales and do not expect to generate any revenue from the sale of drugs in the near future. Substantially all of our revenue recognized to date has consisted of the upfront payment under our agreement with Pfizer. As of June 30, 2013, we have not received any development, regulatory or commercial milestone payments or any royalties under the Pfizer collaboration.

Since our inception, we have also recognized a nominal amount of revenue under research grant contracts, generally to the extent of our costs incurred in connection with specific research or development activities.

Research and Development

Research and development expenses consist of expenses incurred in performing research and development activities, including compensation and benefits for full-time research and development employees, facilities expenses, overhead expenses, cost of laboratory supplies, clinical trial and related clinical manufacturing expenses, fees paid to CROs and other consultants and other outside expenses. Other preclinical research and platform programs include activities related to exploratory efforts, target validation, lead optimization for our earlier programs and our proprietary glycomimetics platform.

To date, our research and development expenses have related primarily to the development of GMI-1070 and our other drug candidates. However, as of April 2013, when we completed our Phase 2 clinical trial of GMI-1070, all further clinical development obligations associated with GMI-1070 have shifted to Pfizer.

We do not currently utilize a formal time allocation system to capture expenses on a project-by-project basis because we are organized and record expense by functional department and our employees may allocate time to more than one development project. Accordingly, we only allocate a portion of our research and development expenses by functional area and by drug candidate, as shown below.

Research and development costs are expensed as incurred. Non-refundable advance payments for goods or services to be received in the future for use in research and development activities are deferred and capitalized. The capitalized amounts are expensed as the related goods are delivered or the services are performed.

Research and development activities are central to our business model. Drug candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later stage clinical trials. We expect our research and development expenses to increase over the next several years as we seek to progress GMI-1271 and our other drug candidates through clinical development. However, it is difficult to determine with certainty the duration and completion costs of our current or future preclinical studies and clinical trials of our drug candidates, or if, when or to what extent we will generate revenues from the commercialization and sale of any of our drug candidates that obtain regulatory approval. We may never succeed in achieving regulatory approval for any of our drug candidates.

The duration, costs and timing of clinical trials and development of our drug candidates will depend on a variety of factors that include, but are not limited to:

- per patient trial costs;
- the number of patients that participate in the trials;
- the number of sites included in the trials;
- the countries in which the trial is conducted;
- the length of time required to enroll eligible patients;
- the number of doses that patients receive;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring or other studies requested by regulatory agencies;
- the duration of patient follow-up; and
- the safety and efficacy profile of the drug candidate.

In addition, the probability of success for each drug candidate will depend on numerous factors, including competition, manufacturing capability and commercial viability. We will determine which programs to pursue and how much to fund each program in response to the scientific and clinical success of each drug candidate, as well as an assessment of each drug candidate’s commercial potential.

General and Administrative

General and administrative expenses consist primarily of salaries and other related costs, including stock-based compensation, for personnel in executive, finance, accounting, business development and human resources functions. Other significant costs include facility costs not otherwise included in research and development expenses, legal fees relating to patent and corporate matters and fees for accounting and consulting services.

We anticipate that our general and administrative expenses will increase in the future to support our continued research and development activities, potential commercialization of our drug candidates and the increased costs of operating as a public company. These increases will likely include increased costs related to the hiring of additional personnel and fees to outside consultants, lawyers and accountants, among other expenses. Additionally, we anticipate increased costs associated with being a public company, including expenses related to services associated with maintaining compliance with NASDAQ listing rules and SEC requirements, insurance and investor relations costs. In addition, if any of our other drug candidates other than GMI-1070 obtains regulatory approval, we expect to incur expenses associated with building a sales and marketing team. However, we do not expect to receive any such regulatory approval for at least the next several years.

Other Income (Expense)

Other income (expense), net consists of interest income earned on our cash and cash equivalents, offset by other expense.

Results of Operations for the Six Months Ended June 30, 2012 and 2013

The following table sets forth our results of operations for the six months ended June 30, 2012 and 2013:

(in thousands)	SIX MONTHS ENDED JUNE 30, 2012	2013	PERIOD-TO-PERIOD CHANGE
Revenue	$7,542	$ 3,863	$ (3,679)
Costs and expenses:			
Research and development	4,256	5,624	1,368
General and administrative	1,090	1,263	173
Total costs and expenses	5,346	6,887	1,541
Income (loss) from operations	2,196	(3,024)	(5,220)
Other income (expense):			
Interest income (expense), net	12	1	(11)
Other expense, net	(13)	(4)	9
Total other expense	(1)	(3)	(2)
Net income (loss)	$2,195	$(3,027)	$ (5,222)

Revenue

Revenue decreased by $3.7 million to $3.9 million for the six months ended June 30, 2013, compared to the six months ended June 30, 2012, reflecting a decrease of 49%. We recognized $7.5 million of the upfront payment from Pfizer during the six months ended June 30, 2012, and the upfront payment was fully recognized as of March 31, 2013, consistent with the completion of our development obligations under the collaboration.

Research and Development Expense

Research and development expense increased by $1.4 million to $5.6 million for the six months ended June 30, 2013, from $4.3 million in the six months ended June 30, 2012, reflecting an increase of 32%. The increase in research and development expense was primarily attributable to an increase in expenses related to the manufacturing and process development of GMI-1271 in preparation for the filing of an IND for this drug candidate in the first quarter of 2014.

The following table summarizes our research and development expenses by functional area for the six months ended June 30, 2012 and 2013 and from our inception to June 30, 2013:

(in thousands)	SIX MONTHS ENDED JUNE 30, 2012	SIX MONTHS ENDED JUNE 30, 2013	PERIOD FROM MAY 21, 2003 (DATE OF INCEPTION) TO JUNE 30, 2013
Clinical development	$ 1,074	$ 961	$ 9,242
Personnel related	1,508	1,935	19,017
Consulting fees	98	143	2,960
Manufacturing and formulation	402	1,193	13,255
Institutional research	147	169	5,607
Preclinical research	424	544	6,633
Laboratory costs	512	581	7,467
Stock-based compensation	91	98	542
	$ 4,256	$ 5,624	$ 64,723

The following table summarizes our research and development expenses by drug candidate for the six months ended June 30, 2012 and 2013 and from our inception to June 30, 2013:

(in thousands)	SIX MONTHS ENDED JUNE 30, 2012	SIX MONTHS ENDED JUNE 30, 2013	PERIOD FROM MAY 21, 2003 (DATE OF INCEPTION) TO JUNE 30, 2013
GMI-1070	$ 1,133	$ 1,005	$ 22,892
GMI-1271	561	1,424	3,751
GMI-1051	53	—	255
Other research and development	910	1,162	18,266
Personnel related and stock-based compensation	1,599	2,033	19,559
	$ 4,256	$ 5,624	$ 64,723

General and Administrative Expense

For the six months ended June 30, 2013, our general and administrative expenses increased by $173,000, or 16%, compared to the six months ended June 30, 2012, primarily related to increased professional services costs.

Results of Operations for the Years Ended December 31, 2011 and 2012

The following table sets forth our results of operations for the years ended December 31, 2011 and 2012:

(in thousands)	YEAR ENDED DECEMBER 31, 2011	2012	PERIOD-TO-PERIOD CHANGE
Revenue	$ 3,814	$15,257	$ 11,443
Costs and expenses:			
Research and development	7,799	9,438	1,639
General and administrative	2,100	2,157	57
Total costs and expenses	9,899	11,595	1,696
Income (loss) from operations	(6,085)	3,662	9,747
Other income (expense):			
Interest income (expense), net	8	21	13
Other expense, net	(36)	(27)	9
Total other expense	(28)	(6)	22
Net income (loss)	$(6,113)	$ 3,656	$ 9,769

Revenue

Revenue increased by $11.4 million to $15.3 million for the year ended December 31, 2012, compared to the year ended December 31, 2011, reflecting an increase of 300%. We entered into the collaboration with Pfizer in October 2011 and therefore only recognized $3.8 million of the $22.5 million upfront payment during the year ended December 31, 2011, reflecting less than three months of recognition, compared to $15.3 million for the year ended December 31, 2012, reflecting a full year of recognition. Revenue for the year ended December 31, 2012 also included $257,000 related to a research grant.

Research and Development Expense

Research and development expense increased by $1.6 million to $9.4 million for the year ended December 31, 2012 from $7.8 million for the year ended December 31, 2011, reflecting an increase of 21%. The increase in research and development expense was primarily attributable to an increase in expenses related to our Phase 2 clinical trial of GMI-1070.

The following table summarizes our research and development expenses by functional area for the years ended December 31, 2011 and 2012 and from our inception to December 31, 2012:

(in thousands)	YEAR ENDED DECEMBER 31, 2011	2012	PERIOD FROM MAY 21, 2003 (DATE OF INCEPTION) TO DECEMBER 31, 2012
Clinical development	$2,140	$2,162	$ 8,281
Personnel related	2,645	3,145	17,082
Consulting fees	407	196	2,817
Milestone payments	—	—	—
Manufacturing and formulation	542	1,194	12,062
Institutional research	633	392	5,439
Preclinical research	533	1,091	6,089
Laboratory costs	730	1,067	6,886
Stock-based compensation	169	191	444
	$7,799	$9,438	$ 59,100

The following table summarizes our research and development expenses by drug candidate for the years ended December 31, 2011 and 2012 and from our inception to December 31, 2012:

(in thousands)	YEAR ENDED DECEMBER 31, 2011	2012	PERIOD FROM MAY 21, 2003 (DATE OF INCEPTION) TO DECEMBER 31, 2012
GMI-1070	$2,746	$2,260	$ 21,887
GMI-1271	315	1,607	2,327
GMI-1051	2	55	255
Other research and development	1,923	2,178	17,105
Personnel related and stock-based compensation	2,813	3,338	17,526
	$7,799	$9,438	$ 59,100

General and Administrative Expense

For the year ended December 31, 2012, our general and administrative expenses increased by $57,000, or 3%, compared to the year ended December 31, 2011, primarily related to increased professional services costs.

Liquidity and Capital Resources

Sources of Liquidity

Since our inception and through June 30, 2013, we have raised an aggregate of $86.6 million to fund our operations, of which $22.5 million was the upfront payment under our license agreement with Pfizer and $64.1 million was from the sale of convertible promissory notes and our convertible preferred stock. As of June 30, 2013, we had $10.8 million in cash and cash equivalents.

We are potentially eligible to earn a significant amount of milestone payments and royalties under our agreement with Pfizer. Our ability to earn these payments and their timing is dependent upon the outcome of Pfizer's activities and is uncertain at this time.

Funding Requirements

Our primary uses of capital are, and we expect will continue to be, compensation and related expenses, third-party clinical research and development services, laboratory and related supplies, clinical costs, legal and other regulatory expenses and general overhead costs.

The successful development of any of our drug candidates is highly uncertain. As such, at this time, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the remainder of the development of GMI-1271 or our other drug candidates. We are also unable to predict when, if ever, material net cash inflows will commence from GMI-1070 or GMI-1271. This is due to the numerous risks and uncertainties associated with developing drugs, including the uncertainty of:

- successful enrollment in, and completion of, clinical trials;
- receipt of marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for drug candidates; and
- launching commercial sales of drugs, if and when approved, whether alone or in collaboration with others.

A change in the outcome of any of these variables with respect to the development of any of our drug candidates would significantly change the costs and timing associated with the development of that drug candidate.

Because our drug candidates are in various stages of clinical and preclinical development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and

commercialization of our drug candidates or whether, or when, we may achieve profitability. Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity or debt financings and collaboration arrangements, including our existing collaboration with Pfizer. Except for Pfizer's obligation to make milestone payments under our agreement with them, upon the completion of this offering, we will not have any committed external source of liquidity.

To the extent that we raise additional capital through the future sale of equity or debt, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our existing common stockholders. If we raise additional funds through the issuance of convertible debt securities, these securities could contain covenants that would restrict our operations. We may require additional capital beyond our currently anticipated amounts. Additional capital may not be available on reasonable terms, or at all. If we raise additional funds through collaboration arrangements in the future, we may have to relinquish valuable rights to our drug candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our drug development or future commercialization efforts or grant rights to develop and market drug candidates that we would otherwise prefer to develop and market ourselves.

Outlook

Based on our research and development plans and our timing expectations related to the progress of our programs, we expect that the net proceeds from this offering, together with our existing cash and cash equivalents as of June 30, 2013, will enable us to fund our operating expenses and capital expenditure requirements for at least the next 12 months, without giving effect to any potential milestone payments we may receive under our license agreement with Pfizer. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we expect. Additionally, the process of testing drug candidates in clinical trials is costly, and the timing of progress in these trials is uncertain.

Cash Flows

Operating Activities

Net cash used in operating activities was $5.2 million during the six months ended June 30, 2012 compared to $6.6 million during the six months ended June 30, 2013. The increase in cash used in operating activities in the six months ended June 30, 2013 compared to the six months ended June 30, 2012 was driven by an increase in operating expenses attributable to the manufacturing and process development of GMI-1271 in preparation for the filing of an IND for this drug candidate in the first quarter of 2014.

Net cash provided by operating activities was $13.9 million for the year ended December 31, 2011 compared to net cash used of $10.5 million for the year ended December 31, 2012. The change was attributable to our having received the $22.5 million upfront payment from Pfizer in October 2011. In addition, we experienced higher operating expenses in 2012 as compared to 2011 resulting from increased clinical trial activities related to GMI-1070 as we neared completion of our Phase 2 clinical trial.

Investing Activities

Net cash used in investing activities relates primarily to the purchase of property and equipment. The increase in property and equipment purchases of $316,000 in 2012 compared to $182,000 in 2011, consisted primarily of purchases of additional laboratory equipment due to the expansion of our research and development activities in 2012. The decrease from $172,000 in the six months ended June 30, 2012 to $30,000 in the six months ended June 30, 2013 resulted from fewer purchases of laboratory equipment in 2013.

Financing Activities

Our financing activities have not been material since our last financing round in October 2009. Net cash provided by financing activities of $20,000 during the six months ended June 30, 2013 reflected cash received from employee stock option exercises, and there were no such activities during the six months ended June 30, 2012. During the year ended December 31, 2011, cash used in financing activities consisted of $24,000 related to the repayment of promissory notes. We did not have any significant cash flows from financing activities during the year ended December 31, 2012.

Contractual Obligations

The following summarizes our significant contractual obligations as of December 31, 2012, all of which consisted of obligations under a non-cancelable lease for our office space, with a term through October 2015, that is subject to escalation clauses.

	PAYMENT DUE BY PERIOD				
(in thousands)	TOTAL	LESS THAN 1 YEAR	1-3 YEARS	3-5 YEARS	MORE THAN 5 YEARS
Operating leases	$1,208	$ 415	$ 793	$ —	$ —
Total	$1,208	$ 415	$ 793	$ —	$ —

We have no material non-cancelable purchase commitments with contract manufacturers or service providers, as we have generally contracted on a cancelable purchase order basis.

The contractual obligations table does not include any potential future payments we may be required to make under our research agreement with the University of Basel, under which we have agreed to pay 10% of any future milestone payments or royalties we may receive from Pfizer with respect to GMI-1070. Due to the uncertainty of the achievement and timing of the events requiring payment under that agreement, the amounts to be paid by us are not fixed or determinable at this time.

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 SEC rules.

Recent Accounting Pronouncements

In May 2011, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, 2011-04, *Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs*, which amended ASC Topic 820 to achieve common fair value measurements and disclosure requirements in GAAP and International Financial Reporting Standards, or IFRS. The amendments in ASU 2011-05 result in common fair value measurement and disclosure requirements in GAAP and IFRS. Consequently, the amendments change the wording used to describe many of the requirements in GAAP for measuring fair value and for disclosing information about fair value measurements. This amendment was effective for fiscal years beginning after December 15, 2011. Our adoption of this amendment did not have a material impact on our financial statements for the year ended December 31, 2012.

JOBS Act

In April 2012, the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, was enacted. Section 107(b) of 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. Thus, an emerging growth company can 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 extended transition period, and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

Quantitative and Qualitative Disclosures about Market Risk

The market risk inherent in our financial instruments and in our financial position represents the potential loss arising from adverse changes in interest rates. As of December 31, 2011 and 2012 and June 30, 2013, we had cash and cash equivalents of $28.2 million, $17.4 million and $10.8 million, respectively. We generally hold our cash in interest-bearing money market accounts. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates. Due to the short-term maturities of our cash equivalents and the low risk profile of our investments, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our cash equivalents.

BUSINESS

Overview

We are a clinical stage biotechnology company focused on the discovery and development of novel glycomimetic drugs to address unmet medical needs resulting from diseases in which carbohydrate biology plays a key role. Glycomimetics are molecules that mimic the structure of carbohydrates involved in important biological processes. Using our expertise in carbohydrate chemistry and knowledge of carbohydrate biology, we are developing a pipeline of proprietary glycomimetics that inhibit disease-related functions of carbohydrates, such as the roles they play in inflammation, cancer and infection. We believe this represents an innovative approach to drug discovery to treat a wide range of diseases.

We are focusing our initial efforts on drug candidates for rare diseases that we believe will qualify for orphan drug designation. We are developing our lead drug candidate, GMI-1070, also known as rivipansel sodium, for the treatment of vaso-occlusive crisis, or VOC, a debilitating and painful condition that occurs periodically throughout the life of a person with sickle cell disease. We have entered into a collaboration with Pfizer Inc. for the further development and potential commercialization of GMI-1070 worldwide. GMI-1070 has received fast track designation from the U.S. Food and Drug Administration, or FDA, as well as orphan drug designation from the FDA in the United States and from the European Medicines Agency, or EMA, in the European Union, or EU. We believe the clinical progress of GMI-1070 provides evidence of the significant potential of our lead program and our proprietary glycomimetics platform. Building on our experience with GMI-1070, we are developing our second most advanced drug candidate, GMI-1271, to be used in combination with chemotherapy to treat acute myeloid leukemia, or AML, a life-threatening hematologic cancer, and potentially other hematologic cancers.

Our proprietary glycomimetics platform is based on our expertise in carbohydrate chemistry and our understanding of the role carbohydrates play in key biological processes. Most human proteins are modified by the addition of complex carbohydrates to the surface of the proteins. The addition of these carbohydrate structures affects the functions of these proteins and their interactions with other molecules. Our initial research and development efforts have focused on drug candidates targeting selectins, which are proteins that serve as adhesion molecules and bind to carbohydrates that are involved in the inflammatory component and progression of a wide range of diseases, including hematologic disorders, cancer and cardiovascular disease. For example, we believe that members of the selectin family play a key role in the onset and progression of VOC. Inhibiting specific carbohydrates from binding to selectins has long been viewed as a potentially attractive approach for therapeutic intervention. The ability to successfully develop drug-like compounds that inhibit binding with selectins, known as selectin antagonists, has been limited by the complexities of carbohydrate chemistry. We believe our expertise in carbohydrate chemistry and our understanding of carbohydrate-protein binding interactions enable us to design selectin antagonists and other glycomimetics that inhibit the disease-related functions of certain carbohydrates. We believe this expertise and knowledge enable us to develop novel drug candidates to address unmet medical needs.

We are developing our lead drug candidate, GMI-1070, to treat VOC. GMI-1070 is a glycomimetic drug candidate that acts as a pan-selectin antagonist, meaning it binds to all three members of the selectin family, E-, P- and L-selectin. We believe that GMI-1070, by acting as a pan-selectin antagonist, inhibits the role that selectins play in VOC.

Sickle cell disease is a genetic disease that, according to the U.S. Centers for Disease Control and Prevention, or CDC, affects millions of people throughout the world, including an estimated 90,000 to 100,000 people in the United States. VOC is one of the most severe complications of sickle cell disease. It can result in acute ischemic tissue injury at one or more sites, with inflammation and pain of varying degrees of severity. The standard of care in the United States for people experiencing VOC is to manage its symptoms, which typically includes hospitalization, narcotic pain management and hydration. There are no approved therapies that interrupt VOC once it has started or that treat the underlying cause of the pain. Hydroxyurea is a generic drug that is approved for the prevention of VOC, but it is not effective in the acute setting to relieve symptoms or resolve an ongoing VOC episode. In addition, hydroxyurea is not suitable for all patients and can have significant toxicities and side effects. According to the CDC, there were approximately 73,000 hospitalizations related to VOC in the United States in 2010. We believe that GMI-1070, if approved, would be the first drug to interrupt the underlying cause of VOC, thereby potentially reducing the use of narcotics for pain management and enabling patients to leave the hospital more quickly.

We have completed four clinical trials of GMI-1070 involving a total of 163 subjects. In April 2013, we completed a Phase 2 clinical trial in which 76 patients hospitalized for VOC, ranging from 12 to 60 years old, were treated with the standard of care plus either GMI-1070 or placebo. In this trial, patients treated with GMI-1070 experienced reductions in the time to reach resolution of VOC, length of hospital stay and use of opioid analgesics for pain management, in each case as compared to patients receiving placebo. This improvement was seen in both adult and pediatric patients. Adverse event rates and severity were comparable between those treated with GMI-1070 and those receiving placebo.

We entered into a license agreement in October 2011 with Pfizer, under which Pfizer has rights to develop and commercialize GMI-1070 for all indications worldwide. Following the completion of our Phase 2 clinical trial, Pfizer is now responsible for the further clinical development, regulatory approval and potential commercialization of GMI-1070. We expect Pfizer to commence a Phase 3 clinical trial of GMI-1070 in mid-2014, pending approval through Pfizer's governance process. Under the Pfizer agreement, we received an upfront payment of $22.5 million from Pfizer and we are eligible to earn up to $320.0 million upon the achievement of specified development, regulatory and commercial milestones. We are also eligible to receive tiered, low double-digit royalties based on net sales of GMI-1070 worldwide, subject to reductions in specified circumstances. Under a separate research agreement with the University of Basel, we have agreed to pay 10% of any future milestone payments and royalties we may receive from Pfizer with respect to GMI-1070. We have retained the worldwide development and commercialization rights to all of our drug candidates other than GMI-1070.

We are developing a pipeline of other drug candidates based on our expertise in carbohydrate chemistry, including compounds that are designed to be specific to particular selectins. We are developing GMI-1271, a specific E-selectin inhibitor, to be used in combination with chemotherapy to treat patients with AML and potentially other hematologic cancers. E-selectin plays a critical role in binding cancer cells within vascular niches in the bone marrow, which prevents the cells from entering circulation where they can be more readily killed by chemotherapy. In animal studies, GMI-1271 mobilized AML cancer cells out of the bone marrow, making them more sensitive to chemotherapy. In these studies, tumor burden was significantly reduced in the animals treated with a combination of chemotherapy and GMI-1271 as compared to animals treated with chemotherapy alone. In other animal studies, GMI-1271 appeared to also protect normal cells from some of the side effects of chemotherapy. Common side effects of chemotherapy include bone marrow toxicity resulting in neutropenia, which is an abnormally low number of neutrophils, the white blood cells that serve as the primary defense against infection, and mucositis, which is the inflammation and sloughing of the mucous membranes lining the digestive tract. Animals treated with GMI-1271 and chemotherapy had less severe neutropenia and mucositis and lower bone marrow toxicity as compared to animals treated with chemotherapy alone. We believe that treatment with GMI-1271 results in lower bone marrow toxicity due to its inhibition of E-selectin, which makes stem cells in the bone marrow divide less frequently, thereby protecting them from chemotherapy agents that target rapidly dividing cells. Based on our preclinical studies, we believe GMI-1271 may improve chemotherapy response rates, duration of remission and, ultimately, survival in patients with hematologic cancers like AML.

We are planning to hold a pre-IND meeting with the FDA in the fourth quarter of 2013 and to file an IND for GMI-1271 in the first quarter of 2014. Assuming the IND is accepted, we plan to initiate a Phase 1 single dose-escalation clinical trial in healthy volunteers in the second quarter of 2014, to be followed by Phase 1/2 multiple dose-escalation clinical trials in defined populations of patients with AML.

Our preclinical pipeline also includes other E-selectin antagonists that we are designing and testing for oral availability, glycomimetic compounds that simultaneously target both E-selectin and a chemokine receptor known as CXCR4, and glycomimetic compounds focused on other targets. For example, we are investigating several compounds, including GMI-1051, to treat pseudomonas infections in combination with antibiotics.

Our intellectual property portfolio contains issued patents and patent applications directed to, among other things, compositions of matter and methods of use for our drug candidates. Our issued patents directed to GMI-1070 are predicted to expire between 2023 and 2029, and our patent applications directed to GMI-1271, if issued, are predicted to expire between 2032 and 2033.

We were founded in 2003 and are headquartered in Gaithersburg, Maryland. Our principal investors are funds managed by New Enterprise Associates, Genzyme Corporation, Anthem Capital, Alliance Technology Ventures and Rosetta Capital.

Our Strategy

Our goal is to be the leader in the discovery, development and commercialization of novel glycomimetic drugs to address unmet medical needs resulting from diseases in which carbohydrate biology plays a key role. Leveraging the potentially broad applicability of our proprietary glycomimetics platform, our initial focus is to internally develop and advance orphan drug candidates targeted at hematologic cancers and other diseases, and to out-license any drug candidates we may develop that are targeted at larger market opportunities. The key elements of our strategy are to:

- ***Support Pfizer's further development of our lead drug candidate, GMI-1070***. Based on the data from our Phase 2 clinical trial for GMI-1070, we believe GMI-1070 has the potential to become the first drug approved to treat VOC. We will continue to work with Pfizer as it proceeds with further clinical development of GMI-1070, including the Phase 3 clinical trial that we expect Pfizer to initiate in mid-2014, and pursues regulatory approval of GMI-1070. We expect to use any milestone and royalty payments that we may receive from Pfizer to accelerate the development of our other drug candidates.
- ***Rapidly advance GMI-1271 for the treatment of AML***. We intend to build on our experience developing GMI-1070 to rapidly advance GMI-1271 for the treatment of AML in combination with chemotherapy. We plan to file an IND with the FDA in the first quarter of 2014 for this indication. Assuming the IND is accepted, we plan to initiate a Phase 1 dose-escalation clinical trial in healthy volunteers in the second quarter of 2014, to be followed by Phase 1/2 dose-escalation clinical trials in defined populations of patients with AML. We have retained worldwide development and commercialization rights to GMI-1271.
- ***Identify and develop additional novel selectin antagonists to address unmet medical needs with significant market potential***. We believe our glycomimetics platform will enable us to develop a broad pipeline of potential drug candidates that may be orphan drugs or may address larger market opportunities. We are in the process of selecting and intend to develop a drug candidate that simultaneously inhibits both E-selectin and CXCR4 for use in the treatment of cancers with significant bone marrow involvement, such as myeloma. We are also working to design an orally available E-selectin antagonist, which we believe could be of significant interest to potential collaborators for major market opportunities, such as the treatment of cardiovascular disease.
- ***Apply our insights and our glycomimetics platform to other carbohydrate targets beyond selectins***. We have identified additional opportunities where carbohydrates play critical roles in disease processes and where we believe we can apply our platform to create targeted glycomimetic drugs. One potential target is pseudomonas, a pathogenic form of bacteria that results in serious infections and is frequently resistant to treatment with antibiotics. We have observed results in animal models that suggest glycomimetic drugs can be used to improve treatment of pseudomonas infections. We have an active preclinical program testing and optimizing compounds to treat these infections.

Our Platform

Our proprietary glycomimetics platform is based on our expertise in carbohydrate chemistry and our understanding of the role carbohydrates play in key biological processes. Carbohydrate structures on cell surfaces are responsible for complex carbohydrate-protein binding interactions. Inhibiting these binding interactions affects the functions of these proteins and their interactions with other molecules. We believe our expertise enables us to design specific glycomimetic molecules that can mimic carbohydrate structures and thereby inhibit their disease-related functions.

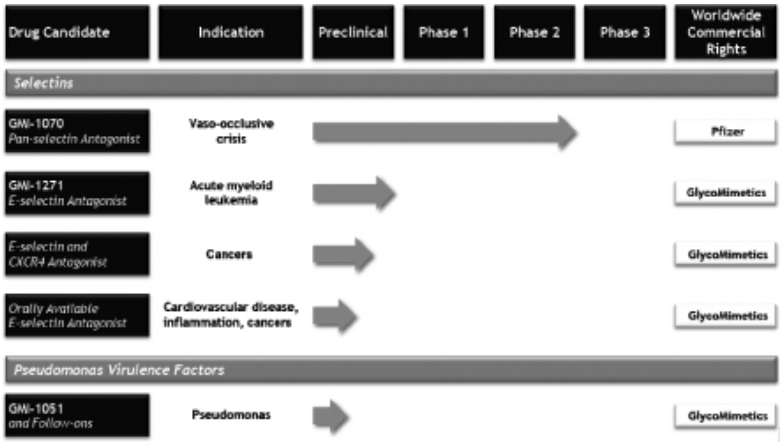
Our initial focus is on selectin antagonists, which we believe have the potential to address unmet medical needs in a number of orphan and large market opportunities. Selectins have been shown to play a key role in a wide range of diseases, including hematologic disorders, cancer and cardiovascular disease.

Our initial drug design efforts are focused on a naturally occurring, three-dimensional complex carbohydrate core structure known as the Lewis structure. This core structure is naturally modified in a variety of ways to form many different carbohydrates. These variations determine the biological functions of the carbohydrates, including functions related to conditions such as inflammatory diseases, cancer and infection. Accordingly, we believe that this structure provides the foundation for the design of many glycomimetic drug candidates that could be used for the treatment of disease.

Once we identify a carbohydrate structure involved in a disease pathway, we design molecules that mimic that carbohydrate structure and inhibit its disease-related functions by binding to the carbohydrate's target receptor, thereby blocking the binding by the native carbohydrate itself. For example, one of the naturally modified Lewis structures binds to selectins, which play a key role in VOC. GMI-1070 mimics that carbohydrate structure and accordingly binds to selectins, which we believe thereby inhibits the progression of VOC. In addition, our glycomimetic molecules are designed to have greater affinity to the carbohydrate's target receptor than does the native carbohydrate. This means that the glycomimetic molecules possess stronger intermolecular forces between themselves and the target receptors, and thus "outcompete" the native carbohydrates in binding to the relevant target receptors, thereby inhibiting their disease-related functions. Using our glycomimetics platform, we have designed and synthesized a proprietary library of these structures targeting different biological processes.

Our Pipeline

We have discovered our drug candidates internally through a rational drug design approach that couples our expertise in carbohydrate chemistry with our knowledge of carbohydrate biology. We are actively developing glycomimetic drug candidates based on this expertise.



GMI-1070—Targeting Selectins to Treat VOC

We are developing GMI-1070 to treat VOC with the goal of reducing duration of VOC episodes, length of hospital stay and use of opioid analgesics for pain management. In our Phase 2 clinical trial, patients treated with GMI-1070 plus the standard of care demonstrated improvement in these endpoints, in each case as compared to patients receiving placebo plus the standard of care.

Sickle Cell Disease and VOC

Sickle cell disease is a genetic disease that, according to the CDC, affects millions of people throughout the world, including an estimated 90,000 to 100,000 people in the United States. One of the most severe complications of sickle cell disease is VOC. VOC episodes are typically characterized by excruciating musculoskeletal pain, visceral pain and pain in other locations, and occur periodically throughout the life of a person with sickle cell disease. The CDC estimates that VOC resulted in approximately 73,000 hospitalizations in the United States in 2010. According to the National Hospital Discharge Survey conducted by the National Center for Health Statistics, these hospitalizations have an average duration of approximately six days. The standard of care in the United States for people experiencing VOC is to manage its symptoms, which typically includes hospitalization, narcotic pain management and hydration. There are no approved therapies that interrupt VOC once it has started or that treat the underlying cause of the pain.

Among both adults and children with sickle cell disease, VOC is the most common reason for seeking medical attention resulting in hospitalization. VOC affects multiple organ systems, and may result in significant clinical complications. Most sickle cell disease-related deaths occur during acute VOC, and are due to infection, acute chest syndrome, stroke or multi-organ failure.

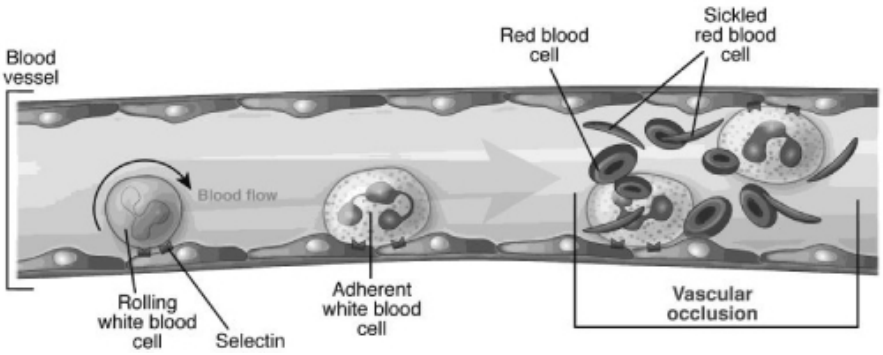
Market Opportunity for Treatment of VOC

We believe that effective treatment of VOC could provide significant clinical and pharmacoeconomic benefit. According to the U.S. Agency for Healthcare Research and Quality, the average hospital charges in the United States for a patient treated for VOC were approximately $20,000 in 2006. In some states, these charges may be substantially higher. For example, according to the California Office of Statewide Health Planning and Development, the average hospital charges for a patient treated for VOC in California were over $40,000 in 2006. A reduction in the length of a hospital stay could reduce these costs. If GMI-1070 is shown to be safe and effective in reducing the duration of VOC in hospitalized patients, it could also be tested to determine if hospitalization could be prevented with use of GMI-1070 in the emergency department, or if VOC could be managed safely and effectively in the home or in an outpatient setting, thereby avoiding costly emergency department visits. We believe that uses in each of these settings represent potentially significant market opportunities.

The Role of Selectins in VOC

The cause of vascular occlusion involves both an inflammatory component and a mechanical component. In the inflammatory component, white blood cells begin to roll along and then adhere to the endothelium, the thin layer of cells that lines the interior surface of blood vessels. These white blood cells then become activated and express adhesion receptors known as integrins, which bind and form aggregates with platelets, red blood cells and other white blood cells. These cell aggregates are responsible for the mechanical component of vascular occlusion, in which rigid sickled red blood cells are more easily caught in the post-capillary venules, which are very small blood vessels connecting the capillaries and the veins. The resulting vascular occlusion causes slowing of blood flow in the post-capillary venules, contributing to inadequate oxygen supply in the local tissue, known as ischemia, which in turn causes further tissue inflammation and pain.

The development of VOC is illustrated in the following diagram:



Selectins are important in this process because they act as adhesion molecules and play a key role in the initial recognition and binding of white blood cells to the endothelial cells, and their formation of aggregates with platelets, red blood cells and other white blood cells. White blood cells express carbohydrates on their surfaces that bind to E-selectin that is present on inflamed vascular endothelium. White blood cells bound to E-selectin on the endothelial cells then become activated and act as adhesion sites for platelets, red blood cells and other white blood cells, thereby leading to the formation of an occlusion. GMI-1070 is a glycomimetic drug candidate designed to inhibit binding of all three types of selectins and inhibit the selectin-mediated recognition and binding of white blood cells to the endothelium. The rationale for the development of GMI-1070 to treat VOC is that, by blocking these steps in the vaso-occlusive process, it has the potential to decrease the duration and intensity of VOC.

Limitations of the Current Standard of Care for VOC

The current standard of care for VOC is focused on managing its symptoms. Narcotics are typically used for the management of acute pain associated with VOC. Pain management often starts with oral medications taken at home at the onset of pain. However, if the pain is not relieved, or if it progresses, patients may seek medical attention in a clinic setting or emergency department. Pain that is not controlled in these settings may require hospitalization for more potent pain medications, typically administered intravenously. The patient must stay in the hospital to receive these intravenous, or IV, pain medications until the VOC resolves and the pain subsides. Other supportive measures during hospitalization include hydration, supplemental oxygen and treatment of any concurrent infections or other conditions. While pain medications can be effective in managing pain during VOC, they do not affect or resolve the underlying vascular occlusion, tissue ischemia or potential organ damage.

The only approved drug targeting VOC is hydroxyurea, which is available in both generic and branded formulations. Hydroxyurea has been approved as a once-daily oral treatment for reducing the frequency of VOC and the need for blood transfusions in adult patients with recurrent moderate-to-severe VOC. While hydroxyurea has been shown to reduce the frequency of VOC in some patient groups, it is not effective in relieving symptoms or accelerating the resolution of an ongoing VOC episode. Moreover, hydroxyurea is not suitable for all patients and can have significant toxicities and side effects. In particular, hydroxyurea is labeled to inform patients that it can cause a severe decrease in the number of blood cells in a patient's bone marrow, which may increase risks that the patient will develop a serious infection or bleeding, and that it may increase the risk that the patient will develop certain cancers. Additionally, since hydroxyurea is prescribed to be taken on a daily basis, lack of patient compliance can be a barrier to its optimal use.

Since available therapies do not interrupt the VOC episode, opioid narcotics are generally prescribed to treat the pain until the VOC runs its natural course. Use of narcotics can lead to tissue or organ damage and resulting complications and morbidities, prolonged hospital stays and associated continuation of pain and suffering. Treatment of pain with IV narcotics and management of VOC-related complications typically require hospital stays ranging from a few days to a few weeks, with an average length of stay of approximately six days.

GMI-1070 Clinical Results

In December 2008, we completed a single dose Phase 1a trial of GMI-1070, in which 40 healthy volunteers were enrolled. Of these subjects, 30 were dosed once with one of five dose levels of GMI-1070, ranging from 2 to 40 mg/kg, and 10 received placebo. In addition, we completed a multiple dose Phase 1b trial in February 2009, in which 32 healthy volunteers were enrolled. Of these subjects, 24 were dosed with four dose levels of GMI-1070, and eight received placebo. Three groups of six subjects each were dosed at 5, 10 or 20 mg/kg every eight hours for 13 doses. An additional group of six subjects received a loading dose of 40 mg/kg, followed by 20 mg/kg every eight hours for six doses. The results of these trials demonstrated a half-life of GMI-1070 of approximately seven hours, with the drug excreted largely intact. GMI-1070 was well tolerated in these subjects and no safety concerns were identified. Adverse events occurred at similar rates across the treatment groups in both of these trials.

In 2010, we completed a Phase 1 pilot trial in 15 adults with sickle cell disease not experiencing VOC. In this trial, patients received a loading dose of 20 mg/kg of GMI-1070, followed by a dose of 10 mg/kg ten hours later. The trial focused on the evaluation of safety, pharmacokinetic, or PK, profiles and certain biomarkers. In individuals with sickle cell disease and at the dose levels intended for further evaluation, no safety concerns associated with the use of GMI-1070 were identified and the PK profile was also similar to that seen in healthy volunteers. When administered to patients with sickle cell disease, GMI-1070 was shown to affect biomarkers of inflammation and coagulation. The results of this trial were selected for oral presentations at the annual meetings of the American Society of Hematology in December 2011 and 2012.

Results from these three Phase 1 clinical trials demonstrated evidence of linear PK for GMI-1070 when administered as single or multiple doses to the 72 healthy volunteers and the 15 patients with sickle cell disease. GMI-1070 was well tolerated in these subjects and no safety concerns were identified. Adverse events occurred at similar rates across the treatment groups in these trials.

We also completed a Phase 2 clinical trial of GMI-1070 in sickle cell patients hospitalized for VOC. We announced top-line results from this trial in April 2013. This trial was a randomized, double-blind, placebo-controlled trial evaluating the safety, efficacy and PK of multiple IV doses of GMI-1070 or placebo in 76 patients hospitalized for

VOC, ranging from 12 to 60 years old. Of these patients, 43 received GMI-1070 and 33 received placebo, in both cases in addition to the standard of care. Patients receiving GMI-1070 in the trial received one of two dose levels. Patients in the low dose group received a loading dose of 20 mg/kg, followed by a 10 mg/kg dose every 12 hours. Patients in the high dose group received a loading dose of 40 mg/kg, followed by a 20 mg/kg dose every 12 hours.

In patients receiving GMI-1070 in this trial, there were reductions in multiple measures related to a VOC episode as compared to patients receiving placebo. Two widely used statistical methods, known as ANCOVA and Kaplan-Meier, were used to analyze the results of this trial. The time to reach resolution of VOC, the primary endpoint of the trial, was reduced in the patients receiving GMI-1070 by a mean of 41.0 hours, as measured by ANCOVA, with a p-value of 0.192, and reduced by a median of 63.3 hours, as measured by Kaplan-Meier, with a p-value of 0.187. P-value is a conventional statistical method for measuring the statistical significance of clinical results. A p-value of 0.05 or less represents statistical significance, meaning that there is a less than 1-in-20 likelihood that the observed results occurred by chance. In addition, in the patients receiving GMI-1070, the time to hospital discharge was reduced by a mean of 54.7 hours, as measured by ANCOVA, with a p-value of 0.096, and a median of 83.9 hours, as measured by Kaplan-Meier, with a p-value of 0.092. The time to transition off IV analgesics was reduced by a mean of 47.0 hours, as measured by ANCOVA, with a p-value of 0.137, and a median of 75.7 hours, with a p-value of 0.089, as measured by Kaplan-Meier. The cumulative amount of opioid analgesic administered during hospitalization was reduced by 83%, as measured by ANCOVA, with a p-value of 0.01. Although the Phase 2 clinical trial was not large enough to detect statistically significant differences in these endpoints, other than with respect to the reduction in cumulative amount of opioid analgesic administered, we believe the observed reductions in these measures in patients treated with GMI-1070, and the consistency of a positive response across multiple measures, demonstrate the potential benefit of GMI-1070.

The types and frequency of adverse events and serious adverse events were comparable across the treatment groups in the Phase 2 clinical trial. Measures of organ function, respiratory and cardiac function and routine tests of medical status while in the hospital were similar between the groups. One serious rash occurred in the high dose group, which resolved with minimal medical treatment. Acute chest syndrome, a complication of sickle cell disease affecting the lungs, occurred in six subjects receiving GMI-1070 and in three subjects receiving placebo. Rehospitalization rates for VOC were similar between the groups and lower than the rehospitalization rate that is typical for VOC.

We believe the favorable effects we observed in our Phase 2 clinical trial are the result of mechanism-based resolution of VOC. Specifically, we believe that by inhibiting selectin-mediated adhesion of white blood cells to the endothelium, GMI-1070 prevents propagation of VOC and promotes early resolution. Results from the Phase 2 clinical trial provide the first clinical evidence of a positive effect of GMI-1070 in adult and pediatric patients experiencing VOC. No currently available therapies provide similar benefits to patients in VOC.

If GMI-1070 is demonstrated to be safe and effective for the treatment of VOC, we believe it may show substantial clinical and pharmacoeconomic benefit. If patients treated with GMI-1070 are discharged more quickly from the hospital, there is potential to reduce the costs of hospitalization, in addition to showing clinical benefit by reduced duration of VOC episodes and reduced use of opioid analgesics for pain management. In addition, if GMI-1070 is shown to be safe and effective for treating VOC in hospitalized patients, it is possible that it could be tested in patients experiencing VOC who are not hospitalized to determine if hospitalization could be prevented or if pain from VOC could be managed safely and effectively in the home or in an outpatient setting. We believe that uses in each of these settings could represent significant market opportunities for GMI-1070. Following the completion of the Phase 2 clinical trial, Pfizer is now responsible for the further clinical development, regulatory approval and potential commercialization of GMI-1070.

Pfizer has advised us through the joint steering committee established under the Pfizer agreement that they intend to begin enrolling patients for a Phase 3 trial of GMI-1070 in mid-2014, pending approval through Pfizer’s governance process. Pfizer has also informed us through the joint steering committee that activities necessary to support the initiation of a Phase 3 trial in mid-2014 are currently underway pending approval through Pfizer’s governance process. The steps that Pfizer has taken and is taking to prepare for a Phase 3 trial include manufacturing of the drug substance to be used in the Phase 3 trial, completion of toxicology studies that would support a Phase 3 trial and an

NDA, engagement with regulatory authorities in the United States and overseas to discuss plans for the conduct of a Phase 3 trial, planning and preparation for a so-called TQTc clinical trial to evaluate cardiac safety that would support a Phase 3 trial, contracting with a CRO to provide services in the conduct of a Phase 3 trial and convening clinical investigators in the United States and overseas to discuss plans for a Phase 3 trial. Although Pfizer has taken and is taking a number of steps to prepare for Phase 3 initiation in mid-2014, there can be no assurance that Pfizer will proceed on that schedule, or at all.

GMI-1271—Targeting the Bone Marrow Microenvironment to Treat Hematologic Cancers

We are developing GMI-1271, a specific E-selectin antagonist, to be used in combination with chemotherapy to treat AML and potentially other hematologic cancers. GMI-1271 targets interactions between cancer cells and the bone marrow microenvironment. In preclinical studies, combining GMI-1271 with chemotherapy made cancer cells more sensitive to chemotherapy. In other preclinical studies, GMI-1271 also reduced some of the toxic effects of chemotherapy, including neutropenia and mucositis, on normal cells.

Acute Myeloid Leukemia

AML, a hematologic cancer that is characterized by the rapid growth of abnormal white blood cells that accumulate in the bone marrow and interfere with the production of normal blood cells, is a relatively rare disease, but one that accounts for the largest number of annual deaths from leukemia in the United States. The American Cancer Society estimates that in 2013, approximately 15,000 people in the United States will be diagnosed with AML and over 10,000 people in the United States will die of the disease. AML is more commonly present in elderly patients, with a median age at diagnosis of 67 years according to the National Cancer Institute. In a review published in the *Journal of Clinical Oncology*, the median overall survival of patients 60 years old or older was 8.7 months. The overall five-year relative survival rate for all AML patients is 24%, and only 5% for patients over 65 years old at diagnosis. Relative survival is a statistical measure of net survival that is calculated by comparing observed survival with expected survival from a comparable set of people who do not have AML, in order to measure the excess mortality that is associated with the AML diagnosis.

A number of published studies indicate that only some AML patients who receive chemotherapy achieve a complete response, which is defined as the disappearance of all signs of AML, and that most of those with a complete response will eventually relapse. Patients who do not enter remission are referred to as refractory, meaning that they are resistant to the chemotherapy treatment.

We believe there is a need for new treatment options for elderly AML patients, as well as those AML patients who relapse or develop refractory disease. Most AML patients with relapsed or refractory disease have no established treatment options and, accordingly, may be referred for participation in clinical studies of potential new therapies. For patients who elect not to participate or are unable to participate, treatment options typically include chemotherapy regimens, hypomethylators and supportive care. Further, many elderly AML patients are too frail to undergo chemotherapy as a result of other medical conditions, and may only be able to tolerate pain comfort or control measures. Without treatment, however, AML is uniformly fatal.

Role of E-selectin in AML

E-selectin has been shown to play important roles in the progression of AML. This has been observed in several studies, which have shown that levels of E-selectin correlate with tumor infiltration and relapse and survival rates. We therefore believe that our E-selectin antagonist, GMI-1271, has the potential to improve the current treatment of AML patients.

GMI-1271 Preclinical Development

Some leukemia cells, known as blast cells, bind to E-selectin in the bone marrow where they are relatively protected from the effects of chemotherapy. This phenomenon is known as cell adhesion-mediated drug resistance, or CAMDR. We believe that E-selectin inhibition disrupts the adhesion involved in CAMDR and mobilizes blast cells out of the bone marrow and into the bloodstream, making them more susceptible to chemotherapy. We believe that this mechanism of action may allow GMI-1271 to improve chemotherapy response rates, duration of remission and, ultimately, survival in patients with hematologic cancers such as AML.

In one *in vivo* study in a mouse model of AML, combining GMI-1271 with chemotherapy mobilized AML blast cells and significantly reduced tumor burden as compared to treatment with chemotherapy alone. In an *in vitro* study, AML cells bound to E-selectin were more resistant to chemotherapy. In a related study, when treated with GMI-1271, the resistance of such cells to chemotherapy was reduced. Tumor cells of patients who have relapsed AML, when tested in the laboratory, bound significantly higher levels of E-selectin than tumor cells of patients at initial diagnosis. We believe that all of this data supports our strategy for targeting E-selectin in these patients. GMI-1271 represents a novel agent that we believe could potentially be combined with many chemotherapeutic agents.

We believe that GMI-1271, by targeting the interactions between cancer cells and bone marrow, may not be specific as to cancer type. In addition to our studies of GMI-1271 targeting AML, we have also tested the drug candidate in other cancer models. In *in vivo* studies involving animal models of pancreatic cancer and breast cancer, GMI-1271, as a single agent, inhibited metastasis, and in the breast cancer model it also translated to improved survival. When combined with chemotherapy, in the pancreatic cancer model, GMI-1271 reduced metastasis to a more significant degree than did the chemotherapy alone.

In addition to its anti-tumor effects, GMI-1271, in animal models, has shown protection against some of the toxicities of chemotherapy. In particular, animals treated with GMI-1271 in combination with chemotherapy had less severe neutropenia and mucositis and lower bone marrow toxicity as compared to animals treated with chemotherapy alone. We believe that treatment with GMI-1271 results in lower bone marrow toxicity due to its inhibition of E-selectin, thereby making hematopoietic stem cells divide less frequently and protecting them from chemotherapy agents that target rapidly dividing cells. Hematopoietic stem cells are blood cells that give rise to all other types of blood cells and are heavily concentrated in the bone marrow. Similar effects have been demonstrated with GMI-1070 and were published in the journal *Nature Medicine* in December 2012. Based on these reductions in some of the toxicities of chemotherapy, we are considering evaluation of these effects as secondary efficacy endpoints in our planned clinical trials.

GMI-1271 Clinical Plans

We are planning to hold a pre-IND meeting with the FDA in the fourth quarter of 2013 and to file an IND for GMI-1271 in the first quarter of 2014. Assuming the IND is accepted, we plan to initiate a Phase 1 single dose-escalation clinical trial of GMI-1271 in healthy volunteers in the second quarter of 2014, to be followed by a Phase 1/2 multiple dose-escalation clinical trial in defined populations of patients with AML. Once dose-escalation is complete, we plan to extend the Phase 1/2 clinical trial into specific patient populations in two or three randomized, placebo-controlled clinical trials. Each of these randomized clinical trials will evaluate a different group of patients with AML. We anticipate that the first two trials will focus on elderly AML patients and relapsed AML patients of all ages. As we obtain more data on GMI-1271 in AML and other malignancies, a third randomized clinical trial may include an additional AML patient group, or may expand to additional hematologic cancers. In these trials, we expect that patients will receive GMI-1271 in combination with standard of care chemotherapy. Each trial may therefore evaluate GMI-1271 in conjunction with a different chemotherapy regimen, based on the standard for that patient population. Although final trial designs are not complete, we expect that the trials will likely be blinded through the first or second course of GMI-1271 in combination with chemotherapy, then unblinded to allow an ongoing evaluation of patient outcomes in comparison to the standard of care. These trials will likely evaluate both short-term outcomes, including response rates and minimal residual disease, and longer-term outcomes, including duration of remission and progression-free survival.

Drug Candidates Targeting E-selectin and CXCR4

We have identified a family of drug candidates that are designed to simultaneously inhibit both E-selectin and a chemokine receptor known as CXCR4. We intend to select one of these drug candidates to be developed for the treatment of cancers with significant bone marrow involvement, such as myeloma. Chemokines are signaling proteins secreted by cells that bind CXCR4. E-selectin and CXCR4 are binding targets that share important roles in cellular migration in cancer and inflammation. Therefore, a compound targeting both E-selectin and CXCR4 may also be useful in treating inflammatory components of disease.

CXCR4 has been successfully targeted by the approved drug plerixaflor, which is marketed by Sanofi as Mozobil. This drug has been shown to improve the mobilization of stem cells out of bone marrow and into the circulating blood where they can be collected in anticipation of a stem cell transplant. CXCR4 is a binding protein on the

surface of stem cells that keeps them in the bone marrow and prevents them from entering the bloodstream. Mozobil works by binding to CXCR4 on stem cells, thereby blocking the bond that normally keeps them anchored to the bone marrow. Mozobil is currently in clinical trials to treat AML and myeloma in combination with chemotherapy.

Due to the similar cellular functions of E-selectin and CXCR4 as adhesion molecules that bind cancer cells in the bone marrow, we believe that targeting both E-selectin and CXCR4 with a single compound could improve efficacy in the treatment of cancers that affect the bone marrow as compared to targeting CXCR4 alone.

GMI-1051 and Other Drug Candidates Targeting Pseudomonas Virulence Factors

Pseudomonas is a pathogenic form of bacteria that is responsible for an increasing number of infections and is frequently resistant to treatment with antibiotics. These bacteria express and secrete molecules known as virulence factors, which are involved in key functions of bacterial survival and propagation. These virulence factors bind to specific carbohydrate structures, which we believe can be targeted with glycomimetic drugs. We have developed one drug candidate, GMI-1051, which is an antagonist of two important pseudomonas virulence factors, PA-IL and PA-IIL.

We have conducted a number of *in vitro* and *in vivo* preclinical studies of GMI-1051. In each study, GMI-1051 inhibited the functions of both PA-IL and PA-IIL and had greater affinity for these targets than did the native carbohydrates. We also studied GMI-1051 *in vivo* in three animal models of pseudomonas infection. In one study, GMI-1051 improved survival of mice in a chronic lung infection model when dosed in combination with tobramycin, an antibacterial often used to treat pseudomonas infections, as compared to treatment with tobramycin alone. In two other studies, GMI-1051 reduced bacterial load in an acute lung infection model and improved survival in a model of surgical infection. We are actively testing and optimizing GMI-1051 and other similar compounds to identify the most suitable drug candidates for further development.

Our Collaboration with Pfizer

Overview

In October 2011, we entered into a license agreement with Pfizer, under which we granted Pfizer an exclusive worldwide license to develop and commercialize GMI-1070, also known as rivipansel sodium, for all fields and uses. The products licensed under the agreement also include certain backup compounds, along with modifications of and improvements to GMI-1070 that meet defined chemical properties.

Under the terms of the agreement, we received a $22.5 million upfront payment and are eligible to earn up to $320.0 million in development, regulatory and commercial milestones. We are also eligible to receive low double-digit royalties for each licensed product that are tiered based on net sales of GMI-1070 worldwide, subject to reductions in specified circumstances.

Development and Commercialization Obligations

Pfizer will initially develop and seek approval for GMI-1070 in the field of sickle cell disease under the agreement. We were responsible for completion of the Phase 2 clinical trial relating to VOC associated with sickle cell disease. Following the recent completion of the Phase 2 clinical trial, we now have no further development or commercialization obligations, and Pfizer is required to use commercially reasonable efforts, at its expense, to develop, obtain regulatory approval for and commercialize GMI-1070 for sickle cell disease in the United States. Pfizer generally must notify us in writing promptly of any decision to cease development activities, efforts to obtain regulatory approval or commercialization of GMI-1070 for the first approved indication.

Governance

The agreement establishes a non-voting, joint steering committee to facilitate the exchange of information regarding the development of licensed products and the initial commercialization plans for such products.

Exclusivity Restrictions

During the term of the agreement, we may not directly or indirectly commercialize any pharmaceutical compound or product that is labeled for the treatment, prevention or prophylaxis of a vaso-occlusive or painful crisis associated with sickle cell disease anywhere in the world, subject to specified exceptions if we or our affiliates were to undergo a change of control.

Term and Termination

The agreement will expire on a licensed product-by-licensed product and country-by-country basis on the date of termination of the applicable royalty term with respect to each licensed product in each country and in its entirety upon the expiration of all applicable royalty terms for all licensed products in all countries. The royalty term for each licensed product in each country is the period commencing with the first commercial sale in the applicable country and ending on the expiration of specified patent coverage or 10 years following the first commercial sale in the applicable country, whichever is later. Pfizer has the right to terminate the agreement, subject to certain notice requirements. The agreement may also be terminated in its entirety either by Pfizer or by us in the event of an uncured material breach by the other party or in the event the other party becomes subject to specified bankruptcy, insolvency or similar circumstances.

Effects of Termination

Upon termination of the agreement by Pfizer for convenience or by us, all rights and licenses granted to Pfizer under the agreement will terminate and Pfizer is obligated to grant us a non-exclusive worldwide license to specified Pfizer proprietary rights to develop and commercialize licensed products in the form being used or sold by Pfizer at the time of such termination, to transfer to us specified data and regulatory materials and approvals, and to provide for the continued supply of licensed products subject to specified terms. If Pfizer has completed additional clinical trials for the applicable licensed product and we obtain such a license or obtain such data and materials and commercialize a licensed product, then, for a period of 10 years from the first commercial sale of such licensed product, Pfizer is eligible to receive royalties at defined percentages in the low single-digits on net sales of such licensed product worldwide, up to a defined aggregate payment cap. The applicable royalty rate and maximum royalty payment cap depend on the stage of clinical development at the time of such termination.

Intellectual Property

We strive to protect the intellectual property that we believe is important to our business, including seeking and maintaining patent protection intended to cover the composition of matter of our drug candidates and their methods of use. As more fully described below, we have issued patents directed to GMI-1070 that are predicted to expire between 2023 and 2029. We have patent applications directed to GMI-1271 that, if issued, are predicted to expire between 2032 and 2033. We also rely on trade secrets and careful monitoring of our proprietary information to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection.

Our success will depend significantly on our ability to obtain and maintain patent and other proprietary protection for commercially important inventions and know-how related to our business, defend and enforce our patents, preserve the confidentiality of our trade secrets and operate without infringing the valid and enforceable patents and other proprietary rights of third parties. We also rely on know-how and continuing technological innovation to develop, strengthen and maintain our proprietary position in the field of glycomimetics.

A third party may hold intellectual property, including patent rights that are important or necessary to the development of our drug candidates. It may be necessary for us to use the patented or proprietary technology of third parties to commercialize our drug candidates, in which case we would be required to obtain a license from these third parties. If we are not able to obtain such a license, or are not able to obtain such a license on commercially reasonable terms, our business could be materially harmed.

We plan to continue to expand our intellectual property estate by filing patent applications directed to additional glycomimetic compounds and their derivatives, compositions and formulations containing them and methods of using them. Additionally, we will seek patent protection in the United States and internationally for novel compositions of matter covering the compounds and their use in a variety of therapies.

The patent positions of biotechnology companies like us are generally uncertain and involve complex legal, scientific and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance, including where a reissue application is filed in relation to an issued patent to correct issues or errors arising during prosecution that may render claims of the issued patent either wholly or partially invalid or unenforceable. Consequently, we do not know whether any of our

drug candidates will be protectable or remain protected by enforceable patents. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. Any patents that we hold may be challenged, circumvented or invalidated by third parties.

Because patent applications in the United States and certain other jurisdictions are maintained in secrecy for 18 months, and since publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain of the priority of inventions covered by pending patent applications. Moreover, we may have to participate in interference proceedings declared by the U.S. Patent and Trademark Office, or USPTO, or a foreign patent office to determine priority of invention or in post-grant challenge proceedings, such as oppositions, that challenge priority of invention or other features of patentability. Such proceedings could result in substantial cost, even if the eventual outcome is favorable to us.

Our patent portfolio is summarized below.

GMI-1070

Our patent coverage on GMI-1070 is based on patent filings that are wholly owned by us. We own five issued U.S. patents that are predicted to expire between 2023 and 2029 and that cover the compound GMI-1070, GMI-1070 as a member of a class of related compounds and methods of using these compounds to modulate selectin-mediated function, including for the treatment of sickle cell disease or a complication associated therewith. On January 25, 2013, we applied for a broadening reissue of one of these patents, U.S. Patent 7,728,117, which expires in 2029 and covers the compound GMI-1070. The reissue application seeks claims to, among other things, pharmaceutical compositions comprising GMI-1070. We do not know when or even if a reissue patent will be granted, or, if a reissue patent is granted, whether the claims under the reissue patent will be broader or narrower than the original patent. If granted, U.S. Patent 7,728,117 will be surrendered and the reissue patent will have the same force and effect as the original patent and the same 2029 expiration date. However, even if we successfully achieve reissue of the patent on such an application, the amendment of any claims may impact our ability to enforce this patent against third parties in relation to infringement occurring before the date of reissue, if the claims of the reissued patent are not substantially identical to those of the original patent, and we will not be able to enforce our reissued patent against third parties who infringe the reissued patent, if such third parties were not also infringing our original patent. We have three pending U.S. patent applications, two of which have recently been allowed by the USPTO, that cover GMI-1070, specifically or as a member of a class, to inhibit selectin-mediated function, to treat platelet-mediated disease or a thrombosis disease or to inhibit metastasis of a cancer of the blood. The patents from these applications, if issued, are predicted to expire between 2023 and 2030. We have two additional patents and one additional patent application that cover compounds closely related to GMI-1070 and compositions thereof. We also have patent applications and patents abroad related to these key U.S. patents and patent applications.

GMI-1271

Our GMI-1271 patent portfolio consists of one pending Patent Cooperation Treaty, or PCT, application and four pending U.S. provisional applications that are wholly owned by us. The PCT application covers the compound GMI-1271, GMI-1271 as a member of a class of related compounds and methods of using these compounds to treat or prevent metastasis of cancer cells, inhibit infiltration of cancer cells into bone marrow, inhibit adhesion of a tumor cell to an endothelial cell, treat or prevent thrombosis and enhance hematopoietic stem cell survival. The PCT application is eligible for entry into the United States and non-U.S. countries. If issued, the resulting patents are predicted to expire around 2032. The U.S. provisional applications are eligible for worldwide filing and may be used to establish non-provisional applications that, if issued, are predicted to expire around 2033.

Other Drug Candidates

In addition, we have patent portfolios that are directed to, among other things, compounds that simultaneously inhibit both E-selectin and CXCR4 and compounds that target pseudomonas virulence factors. These patent portfolios are wholly owned by us and include five issued U.S. patents that are predicted to expire between 2027 and 2031, five pending U.S. non-provisional patent applications that, if issued, are predicted to expire between 2027 and 2031 and four pending U.S. provisional patent applications. The U.S. provisional applications are eligible for worldwide filing and may be used to establish non-provisional applications that, if issued, are predicted to expire around 2033. We also have patent applications and patents abroad related to these U.S. patents and patent applications.

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the earliest date of filing, for example, of a nonprovisional patent application or PCT application.

In the United States, the term of a patent that covers an FDA-approved drug may also be eligible for patent term extension, which permits patent term restoration as compensation for the patent term lost during the FDA regulatory review process. The Hatch-Waxman Act permits a patent term extension 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. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, and only one patent applicable to an approved drug may be extended. Similar provisions are available in Europe and other foreign jurisdictions to extend the term of a patent that covers an approved drug. In the future, if and when our drug candidates receive FDA approval, we expect to apply for patent term extensions on patents covering those drugs. We intend to seek patent term extensions for any of our issued patents in any jurisdiction where these are available; however, there is no guarantee that the applicable 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.

We also rely on trade secret protection for our confidential and proprietary information. Although we take steps to protect our proprietary information and trade secrets, including through agreements with our employees and consultants, third parties may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets. Thus, we may not be able to meaningfully protect our trade secrets. It is our policy to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information concerning our business or financial affairs developed or made known to the individual during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties, except in specific circumstances. In the case of employees, the agreements provide that all inventions conceived by the individual, and which are related to our current or planned business or research and development or made during normal working hours, on our premises or using our equipment or proprietary information, are our exclusive property.

Manufacturing

We do not have any manufacturing facilities or personnel. We currently rely, and expect to continue to rely, on third parties for the manufacturing of our drug candidates for preclinical and clinical testing, as well as for commercial manufacturing if our drug candidates receive marketing approval.

In the case of GMI-1070, the initial process development, manufacturing and scale-up was managed by us and performed under contract by third parties. Under our license agreement with Pfizer, responsibility for manufacturing GMI-1070 has now transferred to Pfizer. With respect to our other drug candidates, we anticipate continuing to manage process development, scale-up and manufacturing under contracts with third parties.

All of our drug candidates are small molecules and are manufactured in reliable and reproducible synthetic processes from readily available starting materials. The chemistry does not require unusual equipment in the manufacturing process. We expect to continue to develop drug candidates that can be produced cost-effectively at contract manufacturing facilities.

Commercialization

We have not yet established a sales, marketing or drug distribution infrastructure. With the exception of GMI-1070, to which we have granted Pfizer exclusive commercialization rights, we generally expect to retain commercial rights in the United States for our current drug candidates, all of which are still in preclinical development. We believe that it will be possible for us to access the U.S. market for those drug candidates through a focused, specialized sales force.

Subject to receiving marketing approvals, we expect to commence commercialization activities by building a focused sales and marketing organization in the United States to sell our drugs. We believe that such an organization will be

able to target the community of physicians who are the key specialists in treating the patient populations for which our drug candidates are being developed. Outside the United States, we expect to enter into distribution and other marketing arrangements with third parties for any of our drug candidates that obtain marketing approval.

We also plan to build a marketing and sales management organization to create and implement marketing strategies for any drugs that we market through our own sales organization and to oversee and support our sales force. The responsibilities of the marketing organization would include developing educational initiatives with respect to approved drugs and establishing relationships with thought leaders in relevant fields of medicine.

Competition

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary drugs. While we believe that our knowledge, experience and scientific resources provide us with competitive advantages, we face potential competition from many different sources, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions and governmental agencies and public and private research institutions. Any drug candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

The key competitive factors affecting the success of all of our drug candidates, if approved, are likely to be their safety, efficacy, convenience, price, the level of generic competition and the availability of coverage and reimbursement from government and other third-party payors.

With respect to GMI-1070, we are not aware of any therapies that have been approved for the treatment of patients experiencing an ongoing VOC episode. The only approved drug for the prevention of VOC is hydroxyurea. While hydroxyurea has been shown to reduce the frequency of VOC in some patient groups and is approved for chronic use for this indication, it is not effective in relieving symptoms or accelerating the resolution of an ongoing VOC episode. Moreover, hydroxyurea is not suitable for all patients and can have significant toxicities and side effects. We are also aware of a company, Mast Therapeutics, Inc., that is developing a drug to treat VOC once the crisis is underway. Mast has announced that it is currently conducting a Phase 3 clinical trial in pediatric patients 8 to 17 years old experiencing VOC.

In addition to efforts to treat VOC once it is underway, there are a number of companies developing therapies to prevent VOC from occurring. We are aware of another company, Selexys Pharmaceuticals Corporation, that is developing a therapy that targets selectins. We believe that the Selexys approach is focused on P-selectin. Selexys has announced that it has commenced enrollment in a Phase 2 clinical trial and that it has granted Novartis an option to acquire the company. Other companies are using different approaches to target a variety of biological mechanisms, including up-regulating fetal hemoglobin, inhibiting a platelet ADP receptor and increasing the affinity of sickle hemoglobin’s binding to oxygen.

We are also aware of efforts to develop cures for sickle cell disease through approaches such as bone marrow transplant and gene therapy. Although bone marrow transplant is currently available, its use is limited by the lack of availability of matched donors and by the risk of serious complications, including graft versus host disease and infection. Attempts to develop a cure through gene therapy remain at an early stage, but if these approaches were to be successful and received regulatory approval, this could limit the market for a drug such as GMI-1070 being developed for treatment of VOC.

With respect to GMI-1271 and its development for the treatment of AML and other hematologic cancers, there is substantial potential competition from other therapies currently in development. While some chemotherapies in development for AML could potentially be complementary to GMI-1271, there are also therapies in development that could be directly competitive with GMI-1271. For example, Mozobil, which is currently marketed by Sanofi, is being studied in combination with chemotherapy for the treatment of AML. As the treatment landscape for AML changes, there is substantial risk that GMI-1271 might not provide additional benefit over other therapies.

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

testing, conducting clinical trials, obtaining regulatory approvals and marketing approved drugs 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 or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Government Regulation and Product Approval

Government authorities in the United States, at the federal, state and local levels, and in other countries, extensively regulate, among other things, the research, development, testing, manufacture, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, import and export of pharmaceutical products, such as those we are developing. The processes for obtaining regulatory approvals in the United States and in foreign countries, along with subsequent compliance with applicable statutes and regulations, require the expenditure of substantial time and financial resources.

United States Government Regulation

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and its implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable United States requirements at any time during the drug development process, approval process or after approval, may subject an applicant to a variety of administrative or judicial sanctions, such as the FDA's refusal to approve pending new drug applications, or NDAs, withdrawal of an approval, imposition of a clinical hold, issuance of warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties.

The process required by the FDA before a drug may be marketed in the United States generally involves:

- completion of preclinical laboratory tests, animal studies and formulation studies in compliance with the FDA's good laboratory practice, or GLP, regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, at each clinical site before each trial may be initiated;
- performance of human clinical trials, including adequate and well-controlled clinical trials, in accordance with good clinical practices, or GCP, to establish the safety and efficacy of the proposed drug for each indication;
- submission to the FDA of an NDA;
- satisfactory completion of an FDA advisory committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is produced to assess compliance with current good manufacturing practices, or cGMP, and to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity, as well as satisfactory completion of an FDA inspection of selected clinical sites to determine GCP compliance; and
- FDA review and approval of the NDA.

Preclinical Studies

Preclinical studies include laboratory evaluation of product chemistry, toxicity and formulation, as well as animal studies to assess potential safety and efficacy. An IND sponsor must submit the results of the preclinical studies, together with manufacturing information, analytical data and any available clinical data or literature, among other things, to the FDA as part of an IND. Some preclinical testing may continue even after the IND is submitted. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to one or more proposed clinical trials and places the clinical trial on a clinical hold. In such a

case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to commence.

Clinical Trials

Clinical trials involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include the requirement that all research subjects provide their informed consent in writing for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. In addition, an IRB at each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must continue to oversee the clinical trial while it is being conducted. Information about certain clinical trials must be submitted within specific timeframes to the National Institutes of Health, or NIH, for public dissemination on their ClinicalTrials.gov website.

Human clinical trials are typically conducted in three sequential phases, which may overlap or be combined. In Phase 1, the drug is initially introduced into healthy human subjects or patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an initial indication of its effectiveness. In Phase 2, the drug typically is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage. In Phase 3, the drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to statistically evaluate the safety and efficacy of the product for approval, to establish the overall risk-benefit profile of the product and to provide adequate information for the labeling of the product.

Progress reports detailing the results of the clinical trials must be submitted, at least annually, to the FDA, and more frequently if serious adverse events occur. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, or at all. Furthermore, the FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements, or if the drug has been associated with unexpected serious harm to patients.

Marketing Approval

Assuming successful completion of the required clinical testing, the results of the preclinical and clinical studies, together with detailed information relating to the product's chemistry, manufacture, controls and proposed labeling, among other things, are submitted to the FDA as part of an NDA requesting approval to market the product for one or more indications. In most cases, the submission of an NDA is subject to a substantial application user fee. Under the Prescription Drug User Fee Act, or PDUFA, guidelines that are currently in effect, the FDA has agreed to certain performance goals regarding the timing of its review of an application.

In addition, under the Pediatric Research Equity Act, an NDA or supplement to an NDA must contain data that are adequate 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 product is safe and effective. The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults, or full or partial waivers from the pediatric data requirements. Unless otherwise required by regulation, the pediatric data requirements do not apply to products with orphan designation.

The FDA also may require submission of a risk evaluation and mitigation strategy, or REMS, plan to mitigate any identified or suspected serious risks. The REMS plan could include medication guides, physician communication plans, assessment plans and elements to assure safe use, such as restricted distribution methods, patient registries or other risk minimization tools.

The FDA conducts a preliminary review of all NDAs within the first 60 days after submission, before accepting them for filing, to determine whether they are sufficiently complete to permit substantive review. The FDA may request

additional information rather than accept an NDA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA reviews an NDA to determine, among other things, whether the drug is safe and effective and whether the facility in which it is manufactured, processed, packaged or held meets standards designed to assure the product's continued safety, quality and purity.

The FDA typically refers questions regarding novel drugs to an external advisory committee. An advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Before approving an NDA, the FDA typically will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical trial sites to assure compliance with GCP.

The testing and approval process for an NDA requires substantial time, effort and financial resources, and takes several years to complete. Data obtained from preclinical and clinical testing are not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. The FDA may not grant approval of an NDA on a timely basis, or at all.

After evaluating the NDA and all related information, including the advisory committee recommendation, if any, and inspection reports regarding the manufacturing facilities and clinical trial sites, the FDA may issue an approval letter, or, in some cases, a complete response letter. A complete response letter generally contains a statement of specific conditions that must be met in order to secure final approval of the NDA and may require additional clinical or preclinical testing in order for FDA to reconsider the application. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when those conditions have been met to the FDA's satisfaction, the FDA will typically issue an approval letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications.

Special FDA Expedited Review and Approval Programs

The FDA has various programs, including fast track designation and priority review, that are intended to expedite or simplify the process for the development and FDA review of drugs that are intended for the treatment of serious or life-threatening diseases or conditions and demonstrate the potential to address unmet medical needs. The purpose of these programs is to provide important new drugs to patients earlier than under standard FDA review procedures. To be eligible for a fast track designation, the FDA must determine, based on the request of a sponsor, that a product is intended to treat a serious or life-threatening disease or condition and demonstrates the potential to address an unmet medical need. The FDA will determine that a product will fill an unmet medical need if it will provide a therapy where none exists or provide a therapy that may be potentially superior to existing therapy based on efficacy or safety factors. GMI-1070 has received fast track designation from the FDA.

The FDA may give a priority review designation to drugs that offer major advances in treatment, or provide a treatment where no adequate therapy exists. A priority review means that the goal for the FDA to review an application is six months from filing of an NDA, rather than the standard review of ten months from filing under current PDUFA guidelines. Most products that are eligible for fast track designation are also likely to be considered appropriate to receive a priority review.

Post-Approval Requirements

Drugs manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion and reporting of adverse experiences with the product. After approval, most changes to the approved product, such as adding new indications, manufacturing changes or other

labeling claims, are subject to further testing requirements and prior FDA review and approval. There also are continuing annual user fee requirements for any marketed products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data.

Even if the FDA approves a product, it may limit the approved indications for use of the product, require that contraindications, warnings or precautions be included in the product labeling, including a boxed warning, require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess a drug's safety after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms under a REMS, which can materially affect the potential market and profitability of the product. The FDA may prevent or limit further marketing of a product based on the results of post-marketing studies or surveillance programs.

In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP requirements. Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market.

Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in mandatory revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

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

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Although physicians, in the practice of medicine, may prescribe approved drugs for unapproved indications, pharmaceutical companies generally are required to promote their drug products only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

In addition, the distribution of prescription pharmaceutical products is subject to the Prescription Drug Marketing Act, or PDMA, which regulates the distribution of drugs and drug samples at the federal level, and sets minimum standards for the registration and regulation of drug distributors by the states. Both the PDMA and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution.

Federal and State Fraud and Abuse and Data Privacy and Security Laws and Regulations

In addition to FDA restrictions on marketing of pharmaceutical products, federal and state fraud and abuse laws restrict business practices in the biopharmaceutical industry. These laws include anti-kickback and false claims laws and regulations, as well as data privacy and security laws and regulations.

The federal Anti-Kickback Statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce or in return for purchasing, leasing, ordering or arranging for or recommending the purchase, lease or order of any item or service reimbursable under Medicare, Medicaid or other federal healthcare programs. The term “remuneration” has been broadly interpreted to include anything of value. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers and formulary managers on the other. Although there are a number of statutory exemptions and regulatory safe harbors protecting some common activities from prosecution, the exemptions and safe harbors are drawn narrowly. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exemption or safe harbor. Several courts have interpreted the statute’s intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the statute has been violated.

The reach of the Anti-Kickback Statute was also broadened by the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively PPACA, which, among other things, amended the intent requirement of the federal Anti-Kickback Statute such that a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, PPACA provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act or the civil monetary penalties statute, which imposes penalties against any person who is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent. PPACA also created new federal requirements for reporting, by applicable manufacturers of covered drugs, payments and other transfers of value to physicians and teaching hospitals.

The federal False Claims Act prohibits any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government or knowingly making, using or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government. A claim includes “any request or demand” for money or property presented to the U.S. government. Several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies’ marketing of products for unapproved, and thus non-reimbursable, uses. The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created new federal criminal statutes that prohibit knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Also, many states have similar fraud and abuse statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

In addition, we may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology and Clinical Health Act, or HITECH, and their respective implementing regulations, including the final omnibus rule published on January 25, 2013, imposes specified requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA’s privacy and security standards directly applicable to “business associates,” defined as independent contractors or agents of covered entities that create, receive, maintain or transmit protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney’s fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of available statutory and regulatory exemptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If our operations are found to be in violation of any of the federal and state laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including criminal and significant civil monetary penalties, damages, fines, imprisonment, exclusion from participation in government healthcare programs and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our products are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

Coverage and Reimbursement

The commercial success of our drug candidates and our ability to commercialize any approved drug candidates successfully will depend in part on the extent to which governmental payor programs at the federal and state levels, including Medicare and Medicaid, private health insurers and other third-party payors provide coverage for and establish adequate reimbursement levels for our drug candidates. Government health administration authorities, private health insurers and other organizations generally decide which drugs they will pay for and establish reimbursement levels for healthcare. In particular, in the United States, private health insurers and other third-party payors often provide reimbursement for products and services based on the level at which the government, through the Medicare or Medicaid programs, provides reimbursement for such treatments. In the United States, the EU and other potentially significant markets for our drug candidates, government authorities and third party payors are increasingly attempting to limit or regulate the price of medical products and services, particularly for new and innovative products and therapies, which often has resulted in average selling prices lower than they would otherwise be. Further, the increased emphasis on managed healthcare in the United States and on country and regional pricing and reimbursement controls in the EU will put additional pressure on product pricing, reimbursement and usage, which may adversely affect our future product sales and results of operations. These pressures can arise from rules and practices of managed care groups, judicial decisions and governmental laws and regulations related to Medicare, Medicaid and healthcare reform, pharmaceutical coverage and reimbursement policies and pricing in general.

Third-party payors are increasingly imposing additional requirements and restrictions on coverage and limiting reimbursement levels for medical products. For example, federal and state governments reimburse covered prescription drugs at varying rates generally below average wholesale price. These restrictions and limitations influence the purchase of healthcare services and products. Third-party payors may limit coverage to specific drug products on an approved list, or formulary, which might not include all of the FDA-approved drug products for a particular indication. Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain the FDA approvals. Our drug candidates may not be considered medically necessary or cost-effective. A payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in drug development. Legislative proposals to reform healthcare or reduce costs under government insurance programs may result in lower reimbursement for our drugs and drug candidates or exclusion of our drugs and drug candidates from coverage. The cost containment measures that healthcare payors and providers are instituting and any healthcare reform could significantly reduce our revenues from the sale of any approved drug candidates. We cannot provide any assurances that we will be able to obtain and maintain third party coverage or adequate reimbursement for our drug candidates in whole or in part.

Impact of Healthcare Reform on Coverage, Reimbursement and Pricing

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

Improvement, and Modernization Act of 2003, or the MMA, imposed new requirements for the distribution and pricing of prescription drugs for Medicare beneficiaries. Under Part D, Medicare beneficiaries may enroll in prescription drug plans offered by private entities that provide coverage of outpatient prescription drugs. Part D plans include both standalone prescription drug benefit plans and prescription drug coverage as a supplement to Medicare Advantage plans. Unlike Medicare Part A and B, Part D coverage is not standardized. Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs, and each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. However, Part D prescription drug formularies must include drugs within each therapeutic category and class of covered Part D drugs, though not necessarily all the drugs in each category or class. Any formulary used by a Part D prescription drug plan must be developed and reviewed by a pharmacy and therapeutic committee. Government payment for some of the costs of prescription drugs may increase demand for any products for which we receive marketing approval. However, any negotiated prices for our future products covered by a Part D prescription drug plan will likely be lower than the prices we might otherwise obtain. Moreover, while the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from Medicare Part D may result in a similar reduction in payments from non-governmental payors.

The American Recovery and Reinvestment Act of 2009 provides funding for the federal government to compare the effectiveness of different treatments for the same illness. A plan for the research will be developed by the Department of Health and Human Services, the Agency for Healthcare Research and Quality and the National Institutes for Health, and periodic reports on the status of the research and related expenditures will be made to Congress. Although the results of the comparative effectiveness studies are not intended to mandate coverage policies for public or private payors, it is not clear what effect, if any, the research will have on the sales of any product, if any such product or the condition that it is intended to treat is the subject of a study. It is also possible that comparative effectiveness research demonstrating benefits in a competitor's product could adversely affect the sales of our product candidates. If third-party payors do not consider our drug candidates to be cost-effective compared to other available therapies, they may not cover our drug candidates, once approved, as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our drugs on a profitable basis.

PPACA became law in March 2010 and substantially changes the way healthcare is financed by both governmental and private insurers. Among other cost containment measures, the PPACA establishes an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents; a new Medicare Part D coverage gap discount program; and a new formula that increases the rebates a manufacturer must pay under the Medicaid Drug Rebate Program. In the future, there may continue to be additional proposals relating to the reform of the U.S. healthcare system, some of which could further limit the prices we are able to charge for our drug candidates, once approved, or the amounts of reimbursement available for our drug candidates once they are approved.

In addition, other legislative changes have been proposed and adopted since PPACA was enacted. In August 2011, the President signed into law the Budget Control Act of 2011, as amended, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend proposals in spending reductions to Congress. The Joint Select Committee on Deficit Reduction did not achieve its targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, triggering the legislation's automatic reductions to several government programs. These reductions include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. Under the Budget Control Act of 2011, as amended, federal budget "sequestration" Medicare payment reductions became effective on April 1, 2013 and automatically reduced payments under various government programs, including, for example, certain Medicare provider and supplier reimbursement payments. Sequestration may have a material adverse effect on our financial operations. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These and other healthcare reform initiatives may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on our financial operations.

Exclusivity and Approval of Competing Products

Hatch-Waxman Patent Listing

In seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent with claims that cover the applicant's product or a method of using the 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 competitors in support of approval of an abbreviated new drug application, or ANDA, or 505(b)(2) NDA. Generally, an ANDA provides for marketing of a drug product that has the same active ingredients in the same strengths, dosage form and route of administration as the listed drug and has been shown to be bioequivalent through *in vitro* or *in vivo* testing or otherwise to the listed drug. ANDA applicants are not required to conduct or submit results of preclinical or clinical tests to prove the safety or efficacy of their drug product, other than the requirement for bioequivalence testing. 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. 505(b)(2) NDAs generally are submitted for changes to a previously approved drug product, such as a new dosage form or indication.

The ANDA or 505(b)(2) NDA applicant is required to certify to the FDA concerning any patents listed for the approved product in the FDA's Orange Book, except for patents covering methods of use for which the ANDA applicant is not seeking approval. Specifically, the applicant must certify with respect to each patent that:

- the required patent information has not been filed;
- the listed patent has expired;
- the listed patent has not expired, but will expire on a particular date and approval is sought after patent expiration; or
- the listed patent is invalid, unenforceable or will not be infringed by the new product.

Generally, the ANDA or 505(b)(2) NDA cannot be approved until all listed patents have expired, except when the ANDA or 505(b)(2) NDA applicant challenges a listed drug. A certification that the proposed product will not infringe the already approved product's listed patents or that such patents are invalid or unenforceable is called a Paragraph IV certification. If the applicant does not challenge the listed patents or indicate that it is not seeking approval of a patented method of use, the ANDA or 505(b)(2) NDA application will not be approved until all the listed patents claiming the referenced product have expired.

If the ANDA or 505(b)(2) NDA 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 application 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 after the receipt of notice of the Paragraph IV certification automatically prevents the FDA from approving the ANDA or 505(b)(2) NDA 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.

Hatch-Waxman Non-Patent Exclusivity

Market and data exclusivity provisions under the FDCA also can delay the submission or the approval of certain applications for competing products. The FDCA provides a five-year period of non-patent data exclusivity within the United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the activity of the drug substance. During the exclusivity period, the FDA may not accept for review an ANDA or a 505(b)(2) NDA submitted by another company that contains the previously approved active moiety. However, an ANDA or 505(b)(2) NDA may be submitted after four years if it contains a certification of patent invalidity or noninfringement.

The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or supplement to an existing NDA or 505(b)(2) NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant, are deemed by the FDA to be essential to the approval of the application or supplement.

Three-year exclusivity may be awarded for changes to a previously approved drug product, such as new indications, dosages, strengths or dosage forms of an existing drug. This three-year exclusivity covers only the conditions of use associated with the new clinical investigations and, as a general matter, does not prohibit the FDA from approving ANDAs or 505(b)(2) NDAs for generic versions of the original, unmodified drug product. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA; however, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Orphan Drug Exclusivity

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biological product intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making a drug or biological product available in the United States for this type of disease or condition will be recovered from sales of the product. Orphan designation must be requested before submitting an NDA or biologics license application. Orphan designation does not convey any advantage in or shorten the duration of the regulatory review and approval process. We have received orphan drug designation for GMI-1070, and we intend to seek orphan drug designation and exclusivity for our other drug candidates whenever it is available.

If a product that has orphan designation subsequently receives the first FDA approval for such drug for the disease or condition for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same drug or biological product for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity. Competitors, however, may receive approval of different products for the indication for which the orphan product has exclusivity or obtain approval for the same product but for a different indication for which the orphan product has exclusivity. If a drug or biological product designated as an orphan product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan product exclusivity. Orphan drug status in the EU has similar, but not identical, benefits.

Pediatric Exclusivity

Pediatric exclusivity is another type of non-patent marketing exclusivity in the United States and, if granted, provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity, including the non-patent and orphan drug exclusivity periods described above. This six-month exclusivity may be granted if an NDA sponsor submits pediatric data that fairly respond to a written request from the FDA for such data. The data do not need to show the product to be effective in the pediatric population studied; rather, if the clinical trial is deemed to fairly respond to the FDA's request, the additional protection is granted. If reports of requested pediatric studies are submitted to and accepted by FDA within the statutory time limits, whatever statutory or regulatory periods of exclusivity or Orange Book listed patent protection cover the drug are extended by six months. This is not a patent term extension, but it effectively extends the regulatory period during which the FDA cannot approve an ANDA or 505(b)(2) application owing to regulatory exclusivity or listed patents. If any of our drug candidates is approved, we anticipate seeking pediatric exclusivity when it is appropriate.

Foreign Regulation

In order to market any product outside of the United States, we would need to comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of our drug candidates. For example, in the EU, we must obtain authorization of a clinical trial application, or CTA, in each member state in which we intend to conduct a clinical trial. Whether or not we obtain FDA approval for a drug, we would need to obtain the necessary approvals by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the drug in those countries. The approval process varies from country to country and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may negatively impact the regulatory process in others.

Employees

As of August 15, 2013, we had 28 employees, all of whom are located in the United States. None of our employees is represented by a labor union or covered by a collective bargaining agreement. We consider our relationship with our employees to be good.

Facilities

Our principal offices occupy approximately 20,000 square feet of leased office space in Gaithersburg, Maryland, pursuant to a lease agreement that expires in October 2015. We believe that our current facilities are suitable and adequate to meet our current needs. We intend to add new facilities or expand existing facilities as we add employees, and we believe that suitable additional or substitute space will be available as needed to accommodate any such expansion of our operations.

Legal Proceedings

We are not currently a party to any material legal proceedings, and we are not aware of any pending or threatened legal proceeding against us that we believe could have a material adverse effect on our business, operating results or financial condition.

MANAGEMENT

Directors and Executive Officers

The following table sets forth information concerning our directors and executive officers, including their ages as of August 15, 2013:

NAME	AGE	POSITION
Executive Officers:		
Rachel K. King	53	President, Chief Executive Officer and Director
John L. Magnani, Ph.D.	60	Vice President of Research, Chief Scientific Officer and Director
Helen M. Thackray, M.D.	45	Vice President of Clinical Development and Chief Medical Officer
Brian M. Hahn	39	Chief Financial Officer
Non-management Directors:		
M. James Barrett, Ph.D.	70	Chairman of the Board of Directors
John J. Baldwin, Ph.D.	78	Director
William M. Gust	70	Director
Michael A. Henos	64	Director
Franklin H. Top, Jr., M.D.	77	Director

Executive Officers

Rachel K. King

Ms. King is a co-founder of our company and has served as our President and Chief Executive Officer and as a member of our board of directors since our inception in 2003. Previously, Ms. King was an Executive in Residence at New Enterprise Associates, a venture capital firm, from 2001 to 2003. From 1999 to 2001, Ms. King served as a Senior Vice President of Novartis Corporation, a pharmaceutical company. Before joining Novartis, Ms. King spent 10 years with Genetic Therapy, Inc., a biotechnology company, where she served in a number of roles as part of the executive team, which included the company's initial public offering and later acquisition by Novartis. After the acquisition by Novartis, she served as Chief Executive Officer of Genetic Therapy, which was then a wholly owned subsidiary of Novartis. Ms. King previously worked at Alza Corporation, a pharmaceutical and medical systems company that was later acquired by Johnson & Johnson, as well as at Bain and Company, a management consulting firm. She received a B.A. from Dartmouth College and an M.B.A. from Harvard Business School. Ms. King currently serves as Chair of the Board of the Biotechnology Industry Organization, and was appointed by Maryland's governor as Chair of the Maryland Life Sciences Advisory Board. The board of directors believes that Ms. King's knowledge of our company as one of our co-founders and her experience with biotechnology companies prior to founding our company allow her to make valuable contributions to the board.

John L. Magnani, Ph.D.

Dr. Magnani is a co-founder of our company and has served as our Vice President of Research and Chief Scientific Officer and as a member of our board of directors since our inception in 2003. Dr. Magnani is also the founder, President and owner of GlycoTech Corporation. Prior to founding GlycoTech, Dr. Magnani was the Vice President of Research at BioCarb, Inc., one of the first glycobiology-based companies. Earlier in his career, Dr. Magnani was a tenured Research Chemist at the National Institute of Arthritis, Diabetes and Digestive and Kidney Diseases, part of the National Institutes of Health. Dr. Magnani received an A.B. from Washington University in St. Louis and a Ph.D. in biology from Princeton University. The board of directors believes that Dr. Magnani's knowledge of our company as one of our co-founders and his scientific expertise in glycobiology allow him to make valuable contributions to the board.

Helen M. Thackray, M.D.

Dr. Thackray has served as our Vice President of Clinical Development since 2006 and as our Chief Medical Officer since January 2012. Prior to joining our company, Dr. Thackray was Vice President of Clinical Product Development at Biosynexus, Inc., a biopharmaceutical company, from 2001 to 2006. From 1995 to 2011, Dr. Thackray was a practicing physician at the Children's National Medical Center in Washington, D.C., where she also completed her pediatrics residency and served as Pediatric Chief Resident and as an Adjunct Instructor in Pediatrics. From 1999 to

2000, she served as a Medical Genetics Fellow at the National Human Genome Research Institute, part of the National Institutes of Health. Dr. Thackray received a B.S. from Stanford University and an M.D. from The George Washington University School of Medicine. She is a board-certified pediatrician, a Fellow of the American Academy of Pediatrics and Assistant Clinical Professor of Pediatrics at The George Washington University School of Medicine. Dr. Thackray is also a member of the Institutional Review Board of Holy Cross Hospital in Silver Spring, Maryland, and recently served on the BIO PDUFA V Technical Discussions team.

Brian M. Hahn

Mr. Hahn has served as our Chief Financial Officer since January 2012 and previously served as our Director of Finance and Administration from February 2010 to January 2012. From 2002 to September 2009, Mr. Hahn served as Executive Director of Finance at MiddleBrook Pharmaceuticals, Inc., formerly Advancis Pharmaceutical, a specialty pharmaceutical company, and from September 2009 to February 2010 he served as Assistant Controller for OpGen, Inc., a biotechnology company. From 1998 to 2001, he was a senior accountant with Bering Truck Corporation. Mr. Hahn received a B.B.A. from Shenandoah University and an M.B.A. from the University of Maryland. Mr. Hahn currently serves as Chair for the Financial Executive Committee of the Technology Council of Maryland.

Non-management Directors

M. James Barrett, Ph.D.

Dr. Barrett has served as a member of our board of directors since 2003. He currently serves as a General Partner of New Enterprise Associates, or NEA, a venture capital firm, where he specializes in biotechnology and works with members of NEA's healthcare investment group on medical devices, healthcare information systems and healthcare services companies. Prior to joining NEA, from 1997 to 2001, Dr. Barrett founded and served as Chairman and Chief Executive Officer at Senseonics, a medical device company. Prior to that, he led three NEA-funded companies, serving from 1987 to 1995 as Chairman and Chief Executive Officer at Genetic Therapy, Inc. and from 1982 to 1987 as President and Chief Executive Officer at Life Technologies, Inc. and its predecessor, Bethesda Research Laboratories, Inc. Previously, Dr. Barrett worked at SmithKline Beecham Corporation, where he held a variety of positions, including President of its In Vitro Diagnostic Division and President of SmithKline Clinical Laboratories. He currently serves on the boards of directors of the publicly held life sciences companies Amicus Therapeutics, Inc., Clovis Oncology, Inc. and Supernus Pharmaceuticals, Inc. Within the past five years, he has served on the board of directors of the publicly traded companies Inhibitex, Inc. (acquired by Bristol-Myers Squibb Co.), YM Biosciences, Inc. and Targacept, Inc. Dr. Barrett received a Ph.D. in biochemistry from the University of Tennessee, an M.B.A. from the University of Santa Clara and a B.S. from Boston College. The board of directors believes that Dr. Barrett's experience overseeing NEA investments in biotechnology, serving as a member of the board of directors of other public companies, prior senior management experience, including as president and chief executive officer of biopharmaceutical companies, and his strong capital markets experience allow him to make valuable contributions to the board.

John J. Baldwin, Ph.D.

Dr. Baldwin has served as a member of our board of directors since 2003. Dr. Baldwin co-founded and has served on the boards of directors of Hua Medicine Ltd. and CarysBio Holdings Co., Ltd. since 2008 and 2011, respectively. From 2001 to 2008, Dr. Baldwin served as co-founder, President and Chief Scientific Officer at VITAE Pharmaceuticals, Inc., a pharmaceutical company. Prior to that, he served as co-founder and Chief Scientific and Technology Officer at Pharmacopeia, Inc., a biopharmaceutical company, from 1993 to 2001. In 2000, he also co-founded WuXi PharmaTech, a research and development service company located in China, and served on its board of directors from 2005 to 2007. Prior to Pharmacopeia, Dr. Baldwin spent over 30 years in various scientific and management positions at Merck & Co., a pharmaceutical company, most recently as Distinguished Senior Scientist. Dr. Baldwin received a B.S. from the University of Delaware and a Ph.D. in organic chemistry from the University of Minnesota. The board of directors believes that Dr. Baldwin's extensive scientific and managerial experience allows him to make valuable contributions to the board.

William M. Gust

Mr. Gust has served as a member of our board of directors since 2006. Since August 2009, Mr. Gust has served as co-founder, President and Chief Executive Officer at Plasmonix, Inc. an early stage nanomaterials company serving the life sciences industry. From 1994 to 2012, Mr. Gust served as Managing General Partner at Anthem Capital

Management, a venture capital firm. Prior to his venture capital career, Mr. Gust was with First Boston and L.F. Rothschild in security analysis and investment banking. Mr. Gust received a B.A. from Northwestern University. The board of directors believes that Mr. Gust's extensive investment and managerial experience, including his experience in working with entrepreneurial companies, allows him to make valuable contributions to the board.

Michael A. Henos

Mr. Henos has served as a member of our board of directors since 2003. Mr. Henos is the founder of, and since 1993 has served as Managing General Partner at, Alliance Technology Ventures, L.P., a venture capital firm, where he focuses on investments in biotechnology and personalized medicine. From 1991 to 2001, Mr. Henos also served as a General Partner at Aspen Ventures, a venture capital partnership. Mr. Henos previously served as a Vice President at 3i Ventures Corporation, the predecessor of Aspen Ventures, from 1986 to 1991. From 1984 to 1986, Mr. Henos served as a healthcare consultant with Ernst & Young, specializing in venture financing of startup medical technology companies. Before joining Ernst & Young, Mr. Henos served in a variety of operating management positions and co-founded and served as Chief Executive Officer at ProMed Technologies, Inc. Within the past five years, Mr. Henos has served as Chairman or as a director of the publicly traded companies Inhibitex, Inc., Genoptix, Inc. (acquired by Novartis Corporation) and AtheroGenics, Inc. Mr. Henos received a B.S. and an M.B.A. from the University of California at Los Angeles. The board of directors believes that Mr. Henos's extensive experience as a past director of several public companies, including biopharmaceutical companies, as well as his financial expertise, allow him to make valuable contributions to the board.

Franklin H. Top, Jr., M.D.

Dr. Top has served as a member of our board of directors since 2003. Dr. Top joined MedImmune, LLC, a pharmaceutical company, as Executive Vice President in 1988 and became Medical Director in 1990, serving in that position until 2003. Dr. Top also served as a member of MedImmune's board of directors from 1988 to 2003. From 2004 until his retirement in 2010, Dr. Top served as Senior Vice President of MedImmune's venture capital affiliate, MedImmune Ventures Inc. From 1987 to 1988, Dr. Top served as Senior Vice President for Clinical and Regulatory Affairs at Praxis Biologics, a biotechnology company. Prior to 1987, Dr. Top served for 22 years in the U.S. Army Medical Research and Development Command where he was appointed Director and Commandant, Walter Reed Army Institute of Research in 1983. Dr. Top received an M.D. and a B.S. from Yale University. The board of directors believes that Dr. Top's extensive scientific and managerial experience, including his experience in working with entrepreneurial companies as a venture capital investor, allows him to make valuable contributions to the board.

Board Composition

Our board of directors currently consists of seven members. Each director is currently elected to the board for a one-year term, to serve until the election and qualification of successor directors at the annual meeting of stockholders, or until the director's earlier removal, resignation or death.

Our directors were elected to and currently serve on the board pursuant to a stockholders agreement among us and several of our largest stockholders. This agreement will terminate upon the completion of this offering, after which there will be no further contractual obligations regarding the election of our directors.

In accordance with our amended and restated certificate of incorporation, which will be in effect upon the completion of this offering, our board of directors will be divided into three classes, each of which will consist, as nearly as possible, of one-third of the total number of directors constituting our entire board and which will serve staggered three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our directors will be divided among the three classes as follows:

- Class I, which will consist of and , and their term will expire at our first annual meeting of stockholders to be held after the completion of this offering;
- Class II, which will consist of and , and their term will expire at our second annual meeting of stockholders to be held after the completion of this offering; and
- Class III, which will consist of , and , and their term will expire at our third annual meeting of stockholders to be held after the completion of this offering.

Our amended and restated bylaws, which will become effective upon the completion of this offering, will provide that the authorized number of directors may be changed only by resolution approved by a 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 will consist of one-third of the directors.

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

Director Independence

Our board of directors has undertaken a review of the independence of our directors and considered whether any director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. As a result of this review, our board of directors has determined that Drs. Barrett, Baldwin and Top and Messrs. Gust and Henos, representing five of our seven directors, are "independent directors" as defined under NASDAQ listing rules.

Committees of the Board of Directors

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee, each of which has the composition and responsibilities described below. From time to time, the board may establish other committees to facilitate the management of our business.

Audit Committee

Our audit committee reviews our internal accounting procedures and consults with and reviews the services provided by our independent registered public accountants. Our audit committee consists of three directors, , and , and our board of directors has determined that each of them is independent within the meaning of NASDAQ listing rules and the independence requirements contemplated by Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act. is the chairman of the audit committee and our board of directors has determined that is an "audit committee financial expert" as defined by SEC rules and regulations. Our board of directors has determined that the composition of our audit committee meets the criteria for independence under, and the functioning of our audit committee complies with, the applicable requirements of the Sarbanes-Oxley Act, NASDAQ listing rules and SEC rules and regulations. We intend to continue to evaluate the requirements applicable to us and we intend to comply with future requirements to the extent that they become applicable to our audit committee. The principal duties and responsibilities of our audit committee include:

- appointing and retaining an independent registered public accounting firm to serve as independent auditor to audit our financial statements, overseeing the independent auditor's work and determining the independent auditor's compensation;
- approving in advance all audit services and non-audit services to be provided to us by our independent auditor;
- establishing procedures for the receipt, retention and treatment of complaints received by us regarding accounting, internal accounting controls, auditing or compliance matters, as well as for the confidential, anonymous submission by our employees of concerns regarding questionable accounting or auditing matters;
- reviewing and discussing with management and our independent auditor the results of the annual audit and the independent auditor's review of our quarterly financial statements; and
- conferring with management and our independent auditor about the scope, adequacy and effectiveness of our internal accounting controls, the objectivity of our financial reporting and our accounting policies and practices.

Compensation Committee

Our compensation committee reviews and determines the compensation of all our executive officers. Our compensation committee consists of three directors, , and , each of whom is a non-employee member of our board of directors as defined in Rule 16b-3 under the Exchange Act and an outside

director under Section 162(m) of the Code. is the chairman of the compensation committee. Our board of directors has determined that the composition of our compensation committee satisfies the applicable independence requirements under, and the functioning of our compensation committee complies with the applicable requirements of, NASDAQ listing rules and SEC rules and regulations. We intend to continue to evaluate and intend to comply with all future requirements applicable to our compensation committee. The principal duties and responsibilities of our compensation committee include:

- establishing and approving, and making recommendations to the board of directors regarding, performance goals and objectives relevant to the compensation of our chief executive officer, evaluating the performance of our chief executive officer in light of those goals and objectives and setting, or recommending to the full board of directors for approval, the chief executive officer's compensation, including incentive-based and equity-based compensation, based on that evaluation;
- setting the compensation of our other executive officers, based in part on the recommendations of our chief executive officer;
- exercising administrative authority under our equity incentive plans and other employee benefit plans;
- establishing policies and making recommendations to our board of directors regarding director compensation;
- reviewing and discussing with management the compensation discussion and analysis that we may be required from time to time to include in SEC filings; and
- preparing a compensation committee report on executive compensation as may be required from time to time to be included in our annual proxy statements or annual reports on Form 10-K filed with the SEC.

Nominating and Corporate Governance Committee

The nominating and corporate governance committee consists of three directors, , and . is the chairman of the nominating and corporate governance committee. Our board of directors has determined that the composition of our nominating and corporate governance committee satisfies the applicable independence requirements under, and the functioning of our nominating and corporate governance committee complies with the applicable requirements of, NASDAQ listing rules and SEC rules and regulations. We will continue to evaluate and will comply with all future requirements applicable to our nominating and corporate governance committee. The nominating and corporate governance committee's responsibilities include:

- assessing the need for new directors and identifying individuals qualified to become directors;
- recommending to the board of directors the persons to be nominated for election as directors and to each of the board's committees;
- assessing individual director performance, participation and qualifications;
- developing and recommending to the board corporate governance principles;
- monitoring the effectiveness of the board and the quality of the relationship between management and the board; and
- overseeing an annual evaluation of the board's performance.

Code of Business Conduct and Ethics for Employees, Executive Officers and Directors

Effective upon the completion of this offering, we will adopt a Code of Business Conduct and Ethics, or the Code of Conduct, applicable to all of our employees, executive officers and directors. Following the completion of this offering, the Code of Conduct will be available on our website at *www.glycomimetics.com*. The nominating and corporate governance committee of our board of directors will be responsible for overseeing the Code of Conduct and must approve any waivers of the Code of Conduct for executive officers and directors. We expect that any amendments to the Code of Conduct, or any waivers of its requirements, will be disclosed on our website.

Compensation Committee Interlocks and Insider Participation

None of our directors who currently serve as members of our compensation committee is, or has at any time during the past year been, one of our officers or employees. None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee of any other entity that has one or more executive officers serving on our board of directors or compensation committee.

Non-Employee Director Compensation

We have not historically paid cash retainers or other compensation with respect to service on our board of directors, except for reimbursement of direct expenses incurred in connection with attending meetings of our board of directors or committees of our board of directors.

None of our non-employee directors received compensation for service on our board of directors during the year ended December 31, 2012 and, accordingly, we have not included a 2012 Director Compensation Table. Ms. King, our President and Chief Executive Officer, and Dr. Magnani, our Vice President of Research and Chief Scientific Officer, are also directors, but do not receive any additional compensation for their service as directors. Ms. King's and Dr. Magnani's compensation as executive officers is set forth below under "Executive Compensation—2012 Summary Compensation Table."

We expect that our board of directors will adopt a director compensation plan for non-employee directors to be effective following the completion of this offering.

Non-Employee Director Equity Outstanding at 2012 Year End

The following table provides information about outstanding stock options held by each of our non-employee directors as of December 31, 2012. All of these options were granted under our 2003 stock incentive plan.

	OPTION AWARDS
M. James Barrett, Ph.D	40,600
John J. Baldwin, Ph.D	40,600
William M. Gust	40,600
Michael A. Henos	40,600
Franklin H. Top, Jr., M.D.	40,600

EXECUTIVE COMPENSATION

Our named executive officers for the year ended December 31, 2012 include our principal executive officer and our three other executive officers:

- Rachel King, our President and Chief Executive Officer;
- John Magnani, Ph.D., our Vice President of Research and Chief Scientific Officer;
- Helen Thackray, M.D., our Vice President of Clinical Development and Chief Medical Officer; and
- Brian Hahn, our Chief Financial Officer.

No other individuals served as executive officers of our company at any point during 2012.

2012 Summary Compensation Table

The following table presents the compensation awarded to, earned by or paid to each of our named executive officers for the year ended December 31, 2012.

NAME AND PRINCIPAL POSITION	SALARY ($)	BONUS ($)[1]	OPTION AWARDS ($)[2]	NON-EQUITY INCENTIVE PLAN COMPENSATION ($)[3]	ALL OTHER COMPENSATION ($)[4]	TOTAL ($)
Rachel King President and Chief Executive Officer	355,000	12,425	—	86,975	180	454,580
John Magnani, Ph.D. Chief Scientific Officer	285,000	7,125	—	49,875	180	342,180
Helen Thackray, M.D. Chief Medical Officer	305,000	7,625	—	53,375	180	366,180
Brian Hahn Chief Financial Officer	190,000	3,800	112,187	26,600	180	332,767

(1) The amounts reflect the discretionary bonus paid for performance during 2012, as discussed further below under "—Narrative to Summary Compensation Table—Annual Bonus."

(2) The amounts reflect the full grant date fair value for awards granted during 2012. The grant date fair value was computed in accordance with ASC Topic 718, *Compensation—Stock Compensation*. Unlike the calculations contained in our financial statements, this calculation does not give effect to any estimate of forfeitures related to service-based vesting, but assumes that the executive will perform the requisite service for the award to vest in full. The assumptions we used in valuing options are described in Note 5 to our audited financial statements included in this prospectus.

(3) The amounts reflect the portion of each officer's target bonus paid based on the achievement of our 2012 corporate goal of completing patient accrual in our Phase 2 clinical trial of GMI-1070, as discussed further below under "—Narrative to Summary Compensation Table—Annual Bonus."

(4) The amounts reflect insurance premiums paid by us during 2012 with respect to life insurance for the benefit of the officer.

Narrative to 2012 Summary Compensation Table

We review compensation annually for all employees, including our executives. In setting executive base salaries and bonuses and granting equity incentive awards, we consider compensation for comparable positions in the market, the historical compensation levels of our executives, individual performance as compared to our expectations and objectives, our desire to motivate our employees to achieve short- and long-term results that are in the best interests of our stockholders and a long-term commitment to our company. We do not target a specific competitive position or a specific mix of compensation among base salary, bonus or long-term incentives.

The compensation committee of our board of directors has historically determined our executives' compensation. Our compensation committee typically reviews and discusses management's proposed compensation with the chief executive officer for all executives other than the chief executive officer. Based on those discussions and its

discretion, the compensation committee then recommends the compensation for each executive officer. Our compensation committee, without members of management present, discusses and ultimately approves the compensation of our executive officers. To date, our compensation committee has not engaged a compensation consultant or adopted a peer group of companies for purposes of determining executive compensation.

Annual Base Salary

The following table presents the base salaries for each of our named executive officers for the years 2012 and 2013. The 2012 base salaries became effective on January 1, 2012 and the 2013 base salaries became effective on January 1, 2013 for all of the named executive officers.

NAME	2012 BASE SALARY ($)	2013 BASE SALARY ($)
Rachel King	355,000	365,650
John Magnani, Ph.D.	285,000	293,550
Helen Thackray, M.D.	305,000	314,500
Brian Hahn	190,000	200,000

Annual Bonus

We seek to motivate and reward our executives for achievements relative to our corporate goals and expectations for each fiscal year. Each named executive officer has a target bonus opportunity, defined as a percentage of his or her annual salary. For 2012 and 2013, the target bonus was as follows:

NAME	2012 TARGET BONUS (% OF SALARY)	2013 TARGET BONUS (% OF SALARY)
Rachel King	35	35
John Magnani, Ph.D.	25	25
Helen Thackray, M.D.	25	25
Brian Hahn	20	25

To reinforce the importance of integrated and collaborative leadership, our executives' bonuses have historically been solely based on company performance, and we did not include an individual performance component.

For 2012, 70% of each executive officer's target bonus was attributable to our corporate goal of completing patient accrual in our Phase 2 clinical trial of GMI-1070. This goal was substantially fully achieved as of the end of the year, and therefore each executive officer was awarded 70% of his or her target bonus for the year. Such amounts are reflected in the "Non-Equity Incentive Plan" column of the Summary Compensation Table above.

The remaining 30% of each executive officer's target bonus was based on a number of corporate objectives, taken together. The specific objectives considered by our compensation committee in determining the level of achievement for this 30% of the target bonus included:

- completing toxicology and safety studies, as well as initial process development and the initiation of manufacturing, all in support of our proposed IND for GMI-1271;
- completing preclinical studies to support the selection of new drug candidates for further development;
- identifying and initiating other new preclinical research programs; and
- increasing our company's visibility through publications, presentations and participation in conferences.

There was no specific weighting attributable to the achievement of any one of these objectives. Rather, the compensation committee made a subjective assessment of our achievement of these goals, after taking into account our chief executive officer's input as to their level of achievement. Based on these factors, in its sole discretion, our

compensation committee determined to award each executive officer a discretionary amount equal to 10% of each executive officer's target bonus for the year, out of the 30% available. This 10% component is reflected in the "Bonus" column of the 2012 Summary Compensation Table above.

Long-Term Incentives

Our 2003 stock incentive plan authorizes us to make grants to eligible recipients of non-qualified stock options, incentive stock options and restricted stock awards. All of our awards under this plan have been in the form of stock options.

We typically grant stock options at the start of employment to each executive and our other employees. Through 2012, we have not maintained a practice of granting additional equity on an annual basis, but we have retained discretion to provide additional targeted grants in appropriate circumstances.

We award stock options on the date the compensation committee approves the grant. We set the option exercise price and grant date fair value based on our per-share valuation on the date of grant.

In 2012, we awarded a stock option to Mr. Hahn in connection with his promotion to our Chief Financial Officer. This was the only option grant to any of our named executive officers in 2012.

Employment Arrangements

Please see "—Potential Payments upon Termination of Employment" for information regarding the employment and severance agreements for each of our named executive officers.

Outstanding Equity Awards at End of 2012

The following table provides information about outstanding stock options held by each of our named executive officers at December 31, 2012. All of these options were granted under our 2003 stock incentive plan. None of our named executive officers held restricted stock or other stock awards at the end of 2012.

NAME	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS (#) EXERCISABLE	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS (#) UNEXERCISABLE	OPTION EXERCISE PRICE ($)	OPTION EXPIRATION DATE
Rachel King	15,000	—	0.34	10/31/2014
	150,200	—	0.34	07/30/2016
	1,441,467	379,333(1)	0.34	01/03/2021
John Magnani, Ph.D.	7,500	—	0.34	10/31/2014
	69,401	—	0.34	07/30/2016
	680,121	178,979(1)	0.34	01/03/2021
Helen Thackray, M.D.	30,000	—	0.34	08/23/2016
	458,850	120,750(1)	0.34	01/03/2021
Brian Hahn	57,552	23,698(2)	0.34	01/03/2021
	—	243,885(3)	0.60	03/19/2022

(1) The unvested shares underlying this option vest in 10 equal monthly installments through October 21, 2013, subject to the officer's continued service through each applicable vesting date.
(2) The unvested shares underlying this option vest in 14 equal monthly installments through February 16, 2014, subject to the officer's continued service through each applicable vesting date.
(3) 25% of the total shares underlying this option vested on January 1, 2013. The remaining shares vest 1/36th monthly through January 1, 2016, subject to the officer's continued service through each applicable vesting date.

Stock Option Exercises During 2012

None of our named executive officers exercised stock options during 2012 or held stock awards that vested in 2012.

Pension Benefits

Our named executive officers did not participate in, or otherwise receive any benefits under, any pension or retirement plan sponsored by us during 2012.

Nonqualified Deferred Compensation

Our named executive officers did not participate in, or otherwise receive any benefits under, any nonqualified deferred compensation plan sponsored by us during 2012.

Potential Payments upon Termination of Employment

We have entered into employment agreements with Ms. King, Dr. Magnani and Dr. Thackray that provide for benefits to be paid if the executives are terminated under specified circumstances.

The following table summarizes the schedule of severance payments these executive officers would receive in the event of a qualifying termination.

TERMINATION SCENARIO AND NAME OF EXECUTIVE	SALARY AND FRINGE BENEFIT CONTINUATION
Death or disability:	
Rachel King	6 months
John Magnani, Ph.D.	6 months
Helen Thackray, M.D.	1 month
Termination without cause or resignation with good reason:	
Rachel King	12 months
John Magnani, Ph.D.	24 months
Helen Thackray, M.D.	6 months

We expect to enter into amended and restated employment agreements with each of our executive officers prior to the completion of this offering.

Health and Welfare Benefits

We maintain a defined contribution employee retirement plan for our employees. Our 401(k) plan is intended to qualify as a tax-qualified plan under Section 401 of the Internal Revenue Code so that contributions to our 401(k) plan, and income earned on such contributions, are not taxable to participants until withdrawn or distributed from the 401(k) plan. Our 401(k) plan provides that each participant may contribute a portion of his or her pre-tax compensation, up to a statutory limit, which is $17,500 for 2013. Participants who are at least 50 years old can also make “catch-up” contributions, which in 2013 may be up to an additional $5,500 above the statutory limit. Under our 401(k) plan, each employee is fully vested in his or her deferred salary contributions. Employee contributions are held and invested by the plan’s trustee, subject to participants’ ability to give investment directions by following specified procedures. We do not currently make discretionary contributions or matching contributions to our 401(k) plan.

We do not provide perquisites or personal benefits to our named executive officers. We do, however, pay the premiums for term life insurance for all of our employees, including our named executive officers.

Equity Incentive Plans

2013 Equity Incentive Plan

We expect that our board of directors will adopt, and our stockholders will approve, prior to the completion of this offering, our 2013 Equity Incentive Plan, or our 2013 plan. We do not expect to issue equity awards under our 2013 plan until after the completion of this offering. Our 2013 plan will provide for the grant of incentive stock options within the meaning of Section 422 of the Internal Revenue Code, or the Code, to our employees and our parent and

subsidiary corporations' employees, and for the grant of nonstatutory stock options, restricted stock awards, restricted stock unit awards, stock appreciation rights, performance stock awards and other forms of stock compensation to our employees, including officers, consultants and directors. Our 2013 plan will also provide for the grant of performance cash awards to our employees, consultants and directors.

Authorized Shares

The maximum number of shares of our common stock that may be issued under our 2013 plan is shares. The number of shares of our common stock reserved for issuance under our 2013 plan will automatically increase on January 1 of each year, for a period of 10 years, from January 1, 2014 continuing through January 1, 2023, by % of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares as may be determined by our board of directors. The maximum number of shares that may be issued pursuant to exercise of incentive stock options under the 2013 plan is .

Shares issued under our 2013 plan may be authorized but unissued or reacquired shares of our common stock. Shares subject to stock awards granted under our 2013 plan that expire or terminate without being exercised in full, or that are paid out in cash rather than in shares, will not reduce the number of shares available for issuance under our 2013 plan. Additionally, shares issued pursuant to stock awards under our 2013 plan that we repurchase or that are forfeited, as well as shares reacquired by us as consideration for the exercise or purchase price of a stock award or to satisfy tax withholding obligations related to a stock award, will become available for future grant under our 2013 plan.

Administration

Our board of directors, or a duly authorized committee thereof, has the authority to administer our 2013 plan. Our board of directors has delegated its authority to administer our 2013 plan to our compensation committee under the terms of the compensation committee's charter. Our board of directors may also delegate to one or more of our officers the authority to (i) designate employees other than officers to receive specified stock awards and (ii) determine the number of shares of our common stock to be subject to such stock awards. Subject to the terms of our 2013 plan, the administrator has the authority to determine the terms of awards, including recipients, the exercise price or strike price of stock awards, if any, the number of shares subject to each stock award, the fair market value of a share of our common stock, the vesting schedule applicable to the awards, together with any vesting acceleration, the form of consideration, if any, payable upon exercise or settlement of the stock award and the terms and conditions of the award agreements for use under our 2013 plan.

The administrator has the power to modify outstanding awards under our 2013 plan. Subject to the terms of our 2013 plan, the administrator has the authority to reprice any outstanding option or stock appreciation right, cancel and re-grant any outstanding option or stock appreciation right in exchange for new stock awards, cash or other consideration or take any other action that is treated as a repricing under GAAP, with the consent of any adversely affected participant.

Section 162(m) Limits

No participant may be granted stock awards covering more than shares of our common stock under our 2013 plan during any calendar year pursuant to stock options, stock appreciation rights and other stock awards whose value is determined by reference to an increase over an exercise price or strike price of at least 100% of the fair market value of our common stock on the date of grant. Additionally, no participant may be granted in a calendar year a performance stock award covering more than shares of our common stock or a performance cash award having a maximum value in excess of $ under our 2013 plan. These limitations enable us to grant awards that will be exempt from the $1.0 million limitation on the income tax deductibility of compensation paid per covered executive officer imposed by Section 162(m) of the Code.

Performance Awards

Our 2013 plan permits the grant of performance-based stock and cash awards that may qualify as performance-based compensation that is not subject to the $1.0 million limitation on the income tax deductibility of compensation paid per covered executive officer imposed by Section 162(m) of the Code. To enable us to grant performance-based awards that will qualify, our compensation committee can structure such awards so that the stock or cash will be issued or paid pursuant to such award only following the achievement of specified pre-established performance goals during a designated performance period.

Corporate Transactions

Our 2013 plan provides that in the event of a specified corporate transaction, including without limitation a consolidation, merger or similar transaction involving our company, the sale, lease or other disposition of all or substantially all of the assets of our company or the consolidated assets of our company and our subsidiaries, or a sale or disposition of at least 50% of the outstanding capital stock of our company, the administrator will determine how to treat each outstanding equity award. The administrator may:

- arrange for the assumption, continuation or substitution of an equity award by a successor corporation;
- arrange for the assignment of any reacquisition or repurchase rights held by us to a successor corporation;
- accelerate the vesting of the equity award and provide for its termination prior to the effective time of the corporate transaction;
- arrange for the lapse, in whole or in part, of any reacquisition or repurchase right held by us; or
- cancel the equity award prior to the transaction in exchange for a cash payment, which may be reduced by the exercise price payable in connection with the equity award.

The administrator is not obligated to treat all equity awards or portions of equity awards, even those that are of the same type, in the same manner. The administrator may take different actions with respect to the vested and unvested portions of an equity award.

Change in Control

The administrator may provide, in an individual award agreement or in any other written agreement between us and the participant, that the equity award will be subject to additional acceleration of vesting and exercisability in the event of a change in control. In the absence of such a provision, no such acceleration of the award will occur.

Plan Amendment or Termination

Our board has the authority to amend, suspend or terminate our 2013 plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. No incentive stock options may be granted after the tenth anniversary of the date our board of directors adopts our 2013 plan.

2003 Stock Incentive Plan

Our board of directors adopted, and our stockholders approved, the 2003 Stock Incentive Plan, or the 2003 plan, in May 2003. Our 2003 plan was most recently amended by our board of directors and our stockholders in March 2012. Our 2003 plan provided for the grant of incentive stock options within the meaning of Section 422 of the Code to our employees, and for the grant of nonstatutory stock options and restricted stock awards to our officers, directors, employees, consultants and advisers. Pursuant to its terms, our 2003 plan automatically expired in May 2013.

Authorized Shares

We previously reserved 5,029,003 shares of our common stock for issuance under our 2003 plan. As of June 30, 2013, 61,790 shares of our common stock have been issued upon the exercise of options granted under our 2003 plan and options to purchase 4,876,698 shares of our common stock were outstanding at a weighted average exercise price of $0.37 per share. Effective upon the expiration of our 2003 plan, no further options or stock awards may be granted under our 2003 plan, but all outstanding stock awards continue to be governed by their existing terms.

Administration

Our board of directors, or a committee thereof appointed by our board of directors, administers our 2003 plan and the option and stock awards granted under it. Our board of directors delegated its authority to administer our 2003 plan to our compensation committee.

Corporate Transactions

Our 2003 plan provides that the administrator may provide that, in the event of a specified change of control transaction, including without limitation a dissolution or liquidation of our company, a merger, consolidation or reorganization of our company with one or more other entities in which our company is not the surviving entity, a sale of substantially all of the assets of our company or any transaction which results in the disposition of at least 60% of the voting power of our company, one or more of the following actions may be taken:

- the purchase of outstanding options for an amount of cash or property that could have been received upon the exercise of the options had the options been fully vested;
- the adjustment of the terms of the options to reflect the change of control transaction;
- the assumption or substitution of the options by a successor corporation; or
- the termination of the options immediately prior to the change of control transaction, provided that the holders of options are given a reasonable period of time to exercise the options with respect to at least 50% of the shares subject to the options, notwithstanding any limits on exercisability.

Limitations on Liability and Indemnification Matters

Upon the completion of this offering, our amended and restated certificate of incorporation will contain provisions that limit the liability of our current and former directors for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of a director's duty of loyalty to the corporation or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- any transaction from which a director derived an improper personal benefit.

This limitation of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Our amended and restated certificate of incorporation and our amended and restated bylaws will provide that we are required to indemnify our directors to the fullest extent permitted by Delaware law. Our amended and restated bylaws will also provide that, upon satisfaction of certain conditions, we are required to advance expenses incurred by a director in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. Our amended and restated bylaws will also provide our board of directors with discretion to indemnify our officers and employees when determined appropriate by the board. We have entered into and expect to continue to enter into agreements to indemnify our directors, and we also expect to enter into agreements to indemnify our executive officers, as determined by the board of directors. With certain exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors. We also maintain customary directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. At present, there is no pending litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought and we are not aware of any threatened litigation that may result in claims for indemnification.

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 them. The director or officer may amend a Rule 10b5-1 plan in some circumstances and may terminate a plan at any time. Our directors and executive officers also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material nonpublic information subject to compliance with the terms of our insider trading policy. Prior to 180 days after the date of this offering, subject to early termination, the sale of any shares under such plan would be subject to the lock-up agreement that the director or officer has entered into with the underwriters.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

There have been no transactions since January 1, 2010 to which we have been a participant in which the amount involved exceeded or will exceed $120,000, and in which any of our directors, executive officers or holders of more than 5% of our capital stock, or any members of their immediate family, had or will have a direct or indirect material interest, other than compensation arrangements which are described under “Executive Compensation.”

Investor Rights Agreement

We have entered into an investor rights agreement, as amended, with our preferred stockholders, including entities affiliated with New Enterprise Associates and Genzyme Corporation, both of which beneficially own more than 5% of our common stock. The investor rights agreement, among other things:

- grants our preferred stockholders specified registration rights with respect to shares of our common stock, including shares of common stock issued or issuable upon conversion of the shares of convertible preferred stock held by them;
- obligates us to deliver periodic financial statements to some of the stockholders who are parties to the investor rights agreement; and
- grants a right of first refusal with respect to sales of our shares by us, subject to specified exclusions, which exclusions include the sale of the shares pursuant to this prospectus, to the stockholders who are parties to the investor rights agreement.

For more information regarding the registration rights provided in this agreement, please refer to the section titled “Description of Capital Stock—Registration Rights.” The provisions of this agreement other than those relating to registration rights will terminate upon the completion of this offering.

Stockholders Agreement

We have entered into a stockholders agreement, as amended, with some of our stockholders, including entities affiliated with New Enterprise Associates and Genzyme Corporation. The stockholders agreement, among other things:

- provides for the voting of shares with respect to the constituency of our board of directors;
- provides for the voting of shares with respect to specified transactions approved by a majority of holders of our outstanding convertible preferred stock;
- grants our investors rights of first refusal and co-sale with respect to proposed transfers of our securities by specified stockholders; and
- grants us rights of first refusal with respect to proposed transfers of our securities by specified stockholders.

The stockholders agreement will terminate upon the completion of this offering.

Indemnification Agreements

Our amended and restated certificate of incorporation will contain provisions limiting the liability of directors, and our amended and restated bylaws will provide that we will indemnify each of our directors to the fullest extent permitted under Delaware law. Our amended and restated certificate of incorporation and amended and restated bylaws will also provide our board of directors with discretion to indemnify our officers and employees when determined appropriate by the board.

In addition, we have entered into an indemnification agreement with each of our directors and we intend to enter into similar agreements with our executive officers prior to the completion of this offering. For more information regarding these agreements, see “Executive Compensation—Limitations on Liability and Indemnification Matters.”

Related Person Transaction Policy

Prior to this offering, we have not had a formal policy regarding approval of transactions with related parties. Prior to the completion of this offering, we expect to adopt a related person transaction policy that sets forth our procedures

for the identification, review, consideration and approval or ratification of related person transactions. The policy will become effective immediately upon the execution of the underwriting agreement for this offering. For purposes of our policy only, a related person transaction is a transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which we and any related person are, were or will be participants in which the amount involved exceeds $120,000. Transactions involving compensation for services provided to us as an employee or director are not covered by this policy. A related person is any executive officer, director or beneficial owner of more than 5% of any class of our voting securities, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, if a transaction has been identified as a related person transaction, including any transaction that was not a related person transaction when originally consummated or any transaction that was not initially identified as a related person transaction prior to consummation, our management must present information regarding the related person transaction to our audit committee, or, if audit committee approval would be inappropriate, to another independent body of our board of directors, for review, consideration and approval or ratification. The presentation must include a description of, among other things, the material facts, the interests, direct and indirect, of the related persons, the benefits to us of the transaction and whether the transaction is on terms that are comparable to the terms available to or from, as the case may be, an unrelated third party or to or from employees generally. Under the policy, we will collect information that we deem reasonably necessary from each director, executive officer and, to the extent feasible, significant stockholder to enable us to identify any existing or potential related-person transactions and to effectuate the terms of the policy. In addition, under our Code of Business Conduct and Ethics that we expect to adopt prior to the completion of this offering, our employees and directors will have an affirmative responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest. In considering related person transactions, our audit committee, or other independent body of our board of directors, will take into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs and benefits to us;
- the impact on a director's independence in the event that the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties or to or from employees generally.

The policy requires that, in determining whether to approve, ratify or reject a related person transaction, our audit committee, or other independent body of our board of directors, must consider, in light of known circumstances, whether the transaction is in, or is not inconsistent with, our best interests and those of our stockholders, as our audit committee, or other independent body of our board of directors, determines in the good faith exercise of its discretion.

PRINCIPAL STOCKHOLDERS

The following table sets forth the beneficial ownership of our common stock as of June 30, 2013 for:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock;
- each of our executive officers;
- each of our directors; and
- all of our current executive officers and directors as a group.

The percentage ownership information shown in the table is based upon 33,854,019 shares of common stock outstanding as of June 30, 2013, after giving effect to the conversion of all of our convertible preferred stock into 30,726,326 shares of common stock, which will occur automatically upon the completion of this offering.

We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules include shares of common stock issuable pursuant to the exercise of stock options or warrants that are either immediately exercisable or exercisable on or before August 29, 2013, which is 60 days after June 30, 2013. These shares are deemed to be outstanding and beneficially owned by the person holding those options or warrants for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

Except as otherwise noted below, the address for persons listed in the table is c/o GlycoMimetics, Inc., 401 Professional Drive, Suite 250, Gaithersburg, Maryland 20879.

NAME OF BENEFICIAL OWNER	NUMBER OF SHARES BENEFICIALLY OWNED	PERCENTAGE OF SHARES BENEFICIALLY OWNED	
		BEFORE OFFERING	AFTER OFFERING
Principal Stockholders:			
Entities affiliated with New Enterprise Associates, Inc.[1]	26,743,014	75.2%	
Genzyme Corporation[2]	3,941,352	11.6	
Executive Officers and Directors:			
Rachel K. King[3]	1,956,133	5.5	
John L. Magnani, Ph.D.[4]	1,019,550	2.9	
Helen M. Thackray, M.D.[5]	585,450	1.7	
Brian M. Hahn[6]	167,630	*	
M. James Barrett, Ph.D.[7]	26,781,922	75.2	
John J. Baldwin, Ph.D.[8]	39,075	*	
William M. Gust[9]	1,474,159	4.3	
Michael A. Henos[10]	1,720,865	5.1	
Franklin H. Top, Jr., M.D.[11]	39,075	*	
All current directors and executive officers as a group (9 persons)[12]	33,783,859	85.5	

* Represents beneficial ownership of less than 1%.

(1) Consists of (a) 1,938,193 shares of common stock, 11,250,850 shares of common stock issuable upon conversion of shares of preferred stock and 1,729,913 shares of common stock issuable upon exercise of warrants held by New Enterprise Associates 10, L.P. (“NEA 10”) and (b) 11,824,058 shares of common stock issuable upon conversion of shares of preferred stock held by New Enterprise Associates 13, L.P. (“NEA 13”). The shares directly held by NEA 10 are indirectly held by NEA Partners 10, L.P. (“NEA Partners 10”), its sole general partner. The individual general partners of NEA Partners 10 are M. James Barrett (a member of our

board of directors), Peter J. Barris and Scott D. Sandell (the "NEA 10 Directors"). NEA Partners 10 and the NEA 10 Directors may be deemed to have shared voting and dispositive power over, and be deemed indirect beneficial owners of, the shares directly held by NEA 10. The shares directly held by NEA 13 are indirectly held by NEA Partners 13, L.P. ("NEA Partners 13"), its sole general partner, NEA 13 GP, LTD ("NEA 13 LTD"), the sole general partner of NEA Partners 13, and each of the individual directors of NEA 13 LTD. The individual Directors of NEA 13 LTD are M. James Barrett (a member of our board of directors), Peter J. Barris, Forest Baskett, Ryan D. Drant, Patrick J. Kerins, Krishna Kolluri, David M. Mott, Scott D. Sandell, Ravi Viswanathan and Harry R. Weller (the "NEA 13 Directors"). NEA Partners 13, NEA 13 LTD and the NEA 13 Directors may be deemed to have shared voting and dispositive power over, and be deemed indirect beneficial owners of, the shares directly held by NEA 13. The principal business address of New Enterprise Associates, Inc. is 1954 Greenspring Drive, Suite 600, Timonium, MD 21093.

(2) Consists of shares of common stock issuable upon conversion of preferred stock. The principal business address of Genzyme Corporation is 500 Kendall Street, Cambridge, MA 02142.

(3) Consists of (a) 28,750 shares of common stock held directly, (b) 1,852,043 shares of common stock underlying options that are vested and exercisable within 60 days of June 30, 2013, (c) 5,750 shares of common stock held by Ms. King's spouse and (d) 69,590 shares of common stock held by family trusts for which Ms. King serves as trustee.

(4) Consists of (a) 65,500 shares of common stock held directly, (b) 900,205 shares of common stock underlying options that are vested and exercisable within 60 days of June 30, 2013, (c) 4,927 shares of common stock underlying immediately exercisable warrants, (d) 32,918 shares of common stock issuable upon conversion of preferred stock held directly and (e) 16,000 shares of common stock held by GlycoTech Corporation, of which Dr. Magnani is the sole stockholder.

(5) Consists of shares of common stock underlying options that are vested and exercisable within 60 days of June 30, 2013.

(6) Consists of shares of common stock underlying options that are vested and exercisable within 60 days of June 30, 2013.

(7) Consists of (a) 38,908 shares of common stock underlying options that are vested and exercisable within 60 days of June 30, 2013 and (b) the shares identified in footnote 1 above.

(8) Consists of 39,075 shares of common stock underlying options that are vested and exercisable within 60 days of June 30, 2013.

(9) Consists of (a) 38,908 shares of common stock underlying options that are vested and exercisable within 60 days of June 30, 2013 and (b) 232,003 shares of common stock, 81,602 shares of common stock underlying immediately exercisable warrants and 1,121,646 shares of common stock issuable upon conversion of preferred stock held directly by Anthem Capital II, L.P. ("Anthem"). The general partner of Anthem is Anthem Capital Partners, LLC ("Anthem Partners"). Mr. Gust, a member of our board of directors, is a manager of Anthem Partners and may be deemed to share voting and dispositive power over the shares held by Anthem.

(10) Consists of (a) 38,908 shares of common stock underlying options that are vested and exercisable within 60 days of June 30, 2013, (b) 39,413 shares of common stock issuable upon conversion of preferred stock held by Mr. Henos's spouse, (c) 379,363 shares of common stock, 142,673 shares of common stock underlying immediately exercisable warrants and 1,103,540 shares of common stock issuable upon conversion of preferred stock held by Alliance Technology Ventures III, L.P ("ATV III") and (d) 4,431 shares of common stock, 1,387 shares of common stock underlying immediately exercisable warrants and 11,150 shares of common stock issuable upon conversion of preferred stock held by ATV III Affiliates Fund, LP ("ATV III Affiliates"). Mr. Henos is a manager of ATV III Partners, LLC, the general partner of ATV III and ATV III Affiliates and shares voting and investment power with respect to the shares held by ATV III and ATV III Affiliates.

(11) Consists of shares of common stock underlying options that are vested and exercisable within 60 days of June 30, 2013.

(12) Consists of 2,739,580 shares of common stock, 25,383,575 shares of common stock issuable upon conversion of preferred stock, 1,960,502 shares of common stock underlying immediately exercisable warrants and 3,700,202 shares of common stock underlying options that are vested and exercisable within 60 days of June 30, 2013.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock and provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries. You should also refer to the amended and restated certificate of incorporation and the amended and restated bylaws, which are filed as exhibits to the registration statement of which this prospectus is part.

General

Upon the completion of this offering, our amended and restated certificate of incorporation, or the restated certificate, will authorize us to issue up to shares of common stock, $0.001 par value per share, and shares of preferred stock, $0.001 par value per share, all of which shares of preferred stock will be undesignated. Our board of directors may establish the rights and preferences of the preferred stock from time to time. As of June 30, 2013, after giving effect to the conversion of all outstanding convertible preferred stock into shares of common stock, there would have been 33,854,019 shares of common stock issued and outstanding, held of record by 24 stockholders.

Common Stock

Voting Rights

Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Under the restated certificate and our amended and restated bylaws, or the restated bylaws, our stockholders will not have cumulative voting rights. Because of this, the holders of a majority of the shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose.

Dividends

Subject to preferences that may be applicable to any then-outstanding shares of preferred stock, holders of common stock are entitled to receive ratably those dividends, if any, as may be declared from time to time by the board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock.

Rights and Preferences

Holders of common stock have no preemptive, conversion or subscription rights and there are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences and privileges of the 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 in the future.

Preferred Stock

All currently outstanding shares of convertible preferred stock will be converted automatically to common stock immediately prior to the completion of this offering.

Following the completion of this offering, our board of directors will have the authority, without further action by our stockholders, to issue up to shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

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 our common stock. The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in

connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of us and may adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock on the rights of holders of common stock until the board of directors determines the specific rights attached to that preferred stock.

We have no present plans to issue any shares of preferred stock following completion of this offering.

Options

As of June 30, 2013, under the 2003 plan, options to purchase an aggregate of 4,876,698 shares of common stock were outstanding. For additional information regarding the terms of this plan, see “Executive Compensation—Equity Incentive Plans.”

Warrants

We have outstanding immediately exercisable warrants to purchase:

- an aggregate of 59,667 shares of our common stock at an exercise price of $0.10 per share, which warrants expire in December 2015;
- an aggregate of 5,100 shares of our common stock at an exercise price of $7.845 per share, which warrants expire in October 2016;
- an aggregate of 985,339 shares of our common stock at an exercise price of $0.10 per share, which warrants expire in July 2018; and
- an aggregate of 1,047,519 shares of our common stock at an exercise price of $0.10 per share, which warrants expire in January 2019.

Each of our outstanding warrants has a net exercise provision under which the holder may, in lieu of payment of the exercise price in cash, surrender the warrant and receive a net amount of shares based on the fair market value of our common stock at the time of exercise of the warrant after deduction of the aggregate exercise price. The warrants also contain provisions for the adjustment of the exercise price and the number of shares issuable upon the exercise of the warrant in the event of certain stock dividends, stock splits, reorganizations, reclassifications and consolidations.

We have also granted registration rights to the warrant holders, as more fully described below under “—Registration Rights.”

Registration Rights

We and the holders of our existing convertible preferred stock have entered into an investor rights agreement. The registration rights provisions of this agreement provide those holders with demand and piggyback registration rights with respect to the shares of our common stock currently held by them and issuable to them upon exercise of warrants and upon conversion of our convertible preferred stock in connection with this offering.

Pursuant to the terms of our currently outstanding warrant to purchase common stock held by a prior lender, the holder has piggyback registration rights with respect to the shares of our common stock issuable upon exercise of the warrant.

Demand Registration Rights

At any time beginning 180 days following the effective date of the registration statement of which this prospectus is a part, the holders of at least 40% of the shares issuable upon conversion of our convertible preferred stock in the aggregate have the right to demand that we file up to a total of two registration statements, as long as the anticipated aggregate offering price, net of underwriting discounts and commissions, would exceed $10.0 million. These registration rights are subject to specified conditions and limitations, including the right of the underwriters, if any, to limit the number of shares included in any such registration under specified circumstances. Upon such a request, we are required to effect the registration as soon as reasonably possible. An aggregate of 33,714,229 shares of common stock and 2,092,525 shares issuable upon the exercise of warrants will be entitled to these demand registration rights.

Piggyback Registration Rights

At any time after the completion of this offering, if we propose to register any of our securities under the Securities Act either for our own account or for the account of other stockholders, the holders of shares of common stock that are issued upon conversion of our convertible preferred stock, some holders of shares of our common stock and the holders of our currently outstanding warrants will each be entitled to notice of the registration and will be entitled to include their shares of common stock in the registration statement. These piggyback registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such registration under specified circumstances. An aggregate of 33,714,229 shares of common stock and 2,097,625 shares issuable upon the exercise of warrants will be entitled to these piggyback registration rights.

Registration on Form S-3

At any time after we become eligible to file a registration statement on Form S-3, holders of shares of our common stock that are issued upon conversion of our convertible preferred stock will be entitled, upon their written request, to have such shares registered by us on a Form S-3 registration statement at our expense, provided that such requested registration has an anticipated aggregate offering size to the public of at least $1.0 million and subject to other specified conditions and limitations. An aggregate of 33,714,229 shares of common stock and 2,092,525 shares issuable upon the exercise of warrants will be entitled to these Form S-3 registration rights.

Expenses of Registration

We will pay all expenses relating to any demand, piggyback or Form S-3 registration, other than underwriting discounts and commissions, subject to specified conditions and limitations.

Termination of Registration Rights

The registration rights granted under the investor rights agreement will terminate upon the seventh anniversary of the completion of this offering or, if earlier, with respect to a particular holder, at such time as that holder and its affiliates may sell all of their shares of common stock pursuant to Rule 144 under the Securities Act of 1933, as amended, without any restrictions on volume.

Anti-Takeover Provisions

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion 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 began, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a “business combination” to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an "interested stockholder" as an entity or person who, together with the person's affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

Certificate of Incorporation and Bylaws to be in Effect Upon the Completion of this Offering

The restated certificate will provide for our board of directors to be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, stockholders holding a majority of the shares of common stock outstanding will be able to elect all of our directors. The restated certificate and the restated bylaws will also provide that directors may be removed by the stockholders only for cause upon the vote of 66 2/3% or more of our outstanding common stock. Furthermore, the authorized number of directors may be changed only by resolution of the board of directors, and vacancies and newly created directorships on the board of directors may, except as otherwise required by law or determined by the board, only be filled by a majority vote of the directors then serving on the board, even though less than a quorum.

The restated certificate and restated bylaws will also provide that all stockholder actions must be effected at a duly called meeting of stockholders and will eliminate the right of stockholders to act by written consent without a meeting. Our restated bylaws will also provide that only our chairman of the board, chief executive officer or the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors may call a special meeting of stockholders.

The restated bylaws will also provide that stockholders seeking to present proposals before a meeting of stockholders to nominate candidates for election as directors at a meeting of stockholders must provide timely advance notice in writing, and will specify requirements as to the form and content of a stockholder's notice.

The restated certificate and restated bylaws will provide that the stockholders cannot amend many of the provisions described above except by a vote of 66 2/3% or more of our outstanding common stock.

The combination of these provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

Choice of Forum

The restated certificate will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a breach of fiduciary duty;
- any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, the restated certificate or the restated bylaws; or
- any action asserting a claim against us that is governed by the internal affairs doctrine.

The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with any action, a court could find the choice of forum provisions contained in our restated certificate to be inapplicable or unenforceable in such action.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is . The transfer agent's address is .

NASDAQ Global Market Listing

We intend to apply for listing of our common stock on The NASDAQ Global Market under the trading symbol "GLYC."

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, no public market existed for our common stock. Future sales of shares of our common stock in the public market after this offering, or the perception that these sales could occur, could adversely affect prevailing market prices for our common stock and could impair our future ability to raise equity capital.

Based on the number of shares outstanding as of June 30, 2013, upon completion of this offering and assuming no exercise of the underwriters' option to purchase additional shares, shares of common stock will be outstanding, assuming no outstanding options or warrants are exercised. All of the shares of common stock sold in this offering will be freely tradable without restrictions or further registration under the Securities Act, except for any shares sold to our "affiliates," as that term is defined under Rule 144 under the Securities Act. The remaining 33,854,019 shares of common stock held by existing stockholders are "restricted securities," as that term is defined in Rule 144 under the Securities Act. Restricted securities may be sold in the public market only if registered or if their resale qualifies for exemption from registration described below under Rule 144 promulgated under the Securities Act.

As a result of contractual restrictions described below and the provisions of Rules 144 and 701, the shares sold in this offering and the restricted securities will be available for sale in the public market as follows:

- the shares sold in this offering and of the existing restricted shares will be eligible for immediate sale upon the completion of this offering;
- approximately restricted shares will be eligible for sale in the public market 90 days after the date of this prospectus, subject to the volume, manner of sale and other limitations under Rule 144 and Rule 701; and
- approximately restricted shares will be eligible for sale in the public market upon expiration of lock-up agreements 180 days after the date of this prospectus, subject in certain circumstances to the volume, manner of sale and other limitations under Rule 144 and Rule 701.

Rule 144

In general, persons who have beneficially owned restricted shares of our common stock for at least six months, and any affiliate of the company who owns either restricted or unrestricted shares of our common stock, are entitled to sell their securities without registration with the SEC under an exemption from registration provided by Rule 144 under the Securities Act.

Non-Affiliates

Any person who is not deemed to have been one of our affiliates at the time of, or at any time during the three months preceding, a sale may sell an unlimited number of restricted securities under Rule 144 if:

- the restricted securities have been held for at least six months, including the holding period of any prior owner other than one of our affiliates;
- we have been subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale; and
- we are current in our Exchange Act reporting at the time of sale.

Any person who is not deemed to have been an affiliate of ours at the time of, or at any time during the three months preceding, a sale and has held the restricted securities for at least one year, including the holding period of any prior owner other than one of our affiliates, will be entitled to sell an unlimited number of restricted securities without regard to the length of time we have been subject to Exchange Act periodic reporting or whether we are current in our Exchange Act reporting.

Affiliates

Persons seeking to sell restricted securities who are our affiliates at the time of, or any time during the three months preceding, a sale, would be subject to the restrictions described above. They are also subject to additional restrictions, by which such person would be required to comply with the manner of sale and notice provisions of

Rule 144 and would be entitled to sell within any three-month period only that number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after the completion of this offering based on the number of shares outstanding as of June 30, 2013; 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 the sale.

Additionally, persons who are our affiliates at the time of, or any time during the three months preceding, a sale may sell unrestricted securities under the requirements of Rule 144 described above, without regard to the six month holding period of Rule 144, which does not apply to sales of unrestricted securities.

Rule 701

Rule 701 under the Securities Act, as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers or directors who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and in the section of this prospectus titled “Underwriting” and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Form S-8 Registration Statements

As soon as practicable after the completion of this offering, we intend to file with the SEC one or more registration statements on Form S-8 under the Securities Act to register the shares of our common stock that are issuable pursuant to our 2003 stock incentive plan and 2013 equity incentive plan. These registration statements will become effective immediately upon filing. Shares covered by these registration statements will then be eligible for sale in the public markets, subject to vesting restrictions, any applicable lock-up agreements described below and Rule 144 limitations applicable to affiliates.

Lock-Up Agreements

We and the holders of substantially all of our common stock outstanding on the date of this prospectus, including each of our executive officers and directors, have entered into lock-up agreements with the underwriters or otherwise agreed, subject to certain exceptions, that we and they will not, directly or indirectly, offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale, or otherwise dispose of or hedge any of our shares of common stock, any options or warrants to purchase shares of our common stock, or any securities convertible into, or exchangeable for or that represent the right to receive shares of our common stock, without the prior written consent of the representatives of the underwriters for a period of 180 days from the date of this prospectus.

Registration Rights

On the date beginning 180 days after the effective date of the registration statement of which this prospectus is a part, the holders of 33,714,229 shares of our common stock issuable upon the conversion of our convertible preferred stock and 2,097,625 shares of our common stock issuable upon the exercise of outstanding warrants, or their transferees, as well as additional shares that may be acquired by them, will be entitled to specified rights with respect to the registration of their shares under the Securities Act. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. See “Description of Capital Stock—Registration Rights” for additional information.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following is a general discussion of the material U.S. federal income tax considerations applicable to non-U.S. holders (as defined herein) with respect to their ownership and disposition of shares of our common stock issued pursuant to this offering. All prospective non-U.S. holders of our common stock should consult their own tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our common stock. In general, a non-U.S. holder means a beneficial owner of our common stock (other than a partnership or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation, or an entity treated as a corporation for U.S. federal income tax purposes, created or organized in the United States or under the laws of the United States or of 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 if (1) a U.S. court can exercise primary supervision over the trust's administration and one or more U.S. persons have the authority to control all of the trust's substantial decisions or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, which we refer to as the Code, existing U.S. Treasury Regulations promulgated thereunder, published administrative pronouncements and rulings of the U.S. Internal Revenue Service, which we refer to as the IRS, and judicial decisions, all as in effect as of the date of this prospectus. These authorities are subject to change and to differing interpretation, possibly with retroactive effect. Any change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus.

We assume in this discussion that a non-U.S. holder holds shares of our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, for investment). This discussion does not address all aspects of U.S. federal income taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances, nor does it address any estate or gift tax consequences, or any aspects of U.S. state, local or non-U.S. taxes. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as holders that own, or are deemed to own, more than 5% of our capital stock (except to the extent specifically set forth below), corporations that accumulate earnings to avoid U.S. federal income tax, tax-exempt organizations, banks, financial institutions, insurance companies, brokers, dealers or traders in securities, commodities or currencies, tax-qualified retirement plans, holders subject to the alternative minimum tax or Medicare contribution tax, holders who hold or receive our common stock pursuant to the exercise of employee stock options or otherwise as compensation, holders holding our common stock as part of a hedge, straddle or other risk reduction strategy, conversion transaction or other integrated investment, holders deemed to sell our common stock under the constructive sale provisions of the Code, controlled foreign corporations, passive foreign investment companies and certain former U.S. citizens or long-term residents.

In addition, this discussion does not address the tax treatment of partnerships (or entities or arrangements that are treated as partnerships for U.S. federal income tax purposes) or persons that hold their common stock through such partnerships. If a partnership, including any entity or arrangement treated as a partnership for U.S. federal income tax purposes, holds shares of our common stock, the U.S. federal income tax treatment of a partner in such partnership will generally depend upon the status of the partner and the activities of the partnership. Such partners and partnerships should consult their own tax advisors regarding the tax consequences of the purchase, ownership and disposition of our common stock.

There can be no assurance that a court or the IRS will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain, a ruling with respect to the U.S. federal income tax consequences to a non-U.S. holder of the purchase, ownership or disposition of our common stock.

Distributions on Our Common Stock

Subject to the discussion below regarding backup withholding and foreign accounts, distributions, if any, on our common stock generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to such holder's adjusted tax basis in the common stock. Any remaining excess will be treated as capital gain from the sale or exchange of such common stock, subject to the tax treatment described below in "Gain on Sale, Exchange or Other Disposition of Our Common Stock." Any such distribution will also be subject to the discussion below under the heading "Foreign Accounts."

Dividends paid to a non-U.S. holder will generally be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the same graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

To claim a reduction or exemption from withholding, a non-U.S. holder of our common stock generally will be required to provide (a) a properly executed IRS Form W-8BEN (or successor form) and satisfy applicable certification and other requirements to claim the benefit of an applicable income tax treaty between the United States and such holder's country of residence, or (b) a properly executed IRS Form W-8ECI stating that dividends are not subject to withholding because they are effectively connected with such non-U.S. holder's conduct of a trade or business within the United States. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty.

A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

Gain on Sale, Exchange or Other Disposition of Our Common Stock

Subject to the discussion below regarding backup withholding and foreign accounts, in general, a non-U.S. holder will not be subject to any U.S. federal income tax on any gain realized upon such holder's sale, exchange or other disposition of shares of our common stock unless:

- the gain is effectively connected with a U.S. trade or business of the non-U.S. holder and, if an applicable income tax treaty so provides, is attributable to a permanent establishment or a fixed base maintained in the United States by such non-U.S. holder, in which case the non-U.S. holder generally will be taxed at the graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code) and, if the non-U.S. holder is a foreign corporation, the branch profits tax described above in "Distributions on Our Common Stock" also may apply;
- the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty) on the net gain derived from the disposition, which may be offset by U.S. source capital losses of the non-U.S. holder, if any (even though the individual is not considered a resident of the United States); or
- our common stock constitutes a U.S. real property interest because we are, or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder's holding period, if shorter) a "U.S. real property holding corporation." Generally, a corporation is a U.S. real property holding corporation

only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we do not believe that we are, or have been, a U.S. real property holding corporation, or that we are likely to become one in the future. Even if we are or become a U.S. real property holding corporation, provided that our common stock is regularly traded, as defined by applicable Treasury Regulations, on an established securities market, our common stock will be treated as a U.S. real property interest only with respect to a non-U.S. holder that holds more than 5% of our outstanding common stock, directly or indirectly, actually or constructively, during the shorter of the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. In such case, 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 U.S. persons (as defined in the Code). No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above.

Backup Withholding and Information Reporting

We must report annually to the IRS and to each non-U.S. holder the gross amount of the dividends on our common stock paid to such holder and the tax withheld, if any, with respect to such dividends. Non-U.S. holders will have to comply with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. A non-U.S. holder generally will not be subject to U.S. backup withholding with respect to payments of dividends on our common stock if it certifies its non-U.S. status by providing a valid IRS Form W-8BEN or W-8ECI, or otherwise establishes an exemption; *provided* we do not have actual knowledge or reason to know such non-U.S. holder is a U.S. person, as defined in the Code. Dividends paid to non-U.S. holders subject to the U.S. withholding tax, as described above in “Distributions on Our Common Stock,” generally will be exempt from U.S. backup withholding.

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder may be allowed as a credit against the non-U.S. holder’s U.S. federal income tax liability, if any, and may entitle such holder to a refund, provided that the required information is timely furnished to the IRS.

Foreign Accounts

The Code generally will impose a U.S. federal withholding tax of 30% on dividends and the gross proceeds of a disposition of our common stock paid to a “foreign financial institution” (as specifically defined in the Code), unless such institution enters into an agreement with the U.S. government to, among other things, withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners), or otherwise qualifies for an exemption from these rules. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing these withholding and reporting requirements may be subject to different rules. A U.S. federal withholding tax of 30% will apply to dividends and the gross proceeds of a disposition of our common stock paid to a non-financial foreign entity (as defined in the Code), unless such entity provides the withholding agent with either a

certification that it does not have any substantial direct or indirect U.S. owners or provides information regarding substantial direct and indirect U.S. owners of the entity, or otherwise qualifies for an exemption from these rules. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing these withholding and reporting requirements may be subject to different rules. The withholding provisions described above will generally apply to dividends on our common stock paid on or after July 1, 2014 and with respect to gross proceeds of a sale or other disposition of our common stock on or after January 1, 2017. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes.

UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement dated as of the date of this prospectus, among us and Jefferies LLC and Barclays Capital Inc. as the representatives of the underwriters named below and the joint book-running managers of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the respective number of shares of common stock shown opposite its name below:

UNDERWRITER	NUMBER OF SHARES
Jefferies LLC	
Barclays Capital Inc.	
Stifel, Nicolaus & Company, Incorporated	
Canaccord Genuity Inc.	
Total	

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares of common stock if any of them are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the completion of this offering, they currently intend to make a market in the common stock as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for the common stock, that you will be able to sell any of the common stock held by you at a particular time or that the prices that you receive when you sell will be favorable.

The underwriters are offering the shares of common stock subject to their acceptance of the shares of common stock from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part. In addition, the underwriters have advised us that they do not intend to confirm sales to any account over which they exercise discretionary authority.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of $ per share of common stock. The underwriters may allow, and certain dealers may reallow, a discount from the concession not in excess of $ per share of common stock to certain brokers and dealers. After the offering, the initial public offering price, concession and reallowance to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	PER SHARE		TOTAL	
	WITHOUT OPTION TO PURCHASE ADDITIONAL SHARES	WITH OPTION TO PURCHASE ADDITIONAL SHARES	WITHOUT OPTION TO PURCHASE ADDITIONAL SHARES	WITH OPTION TO PURCHASE ADDITIONAL SHARES
Public offering price	$	$	$	$
Underwriting discounts and commissions paid by us				
Proceeds to us before expenses				

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately $.

Determination of Offering Price

Prior to this offering, there has not been a public market for our common stock. Consequently, the initial public offering price for our common stock will be determined by negotiations between us and the representatives. Among the factors to be considered in these negotiations will be prevailing market conditions, our financial information, market valuations of other companies that we and the underwriters believe to be comparable to us, estimates of our business potential, the present state of our development and other factors deemed relevant.

We offer no assurances that the initial public offering price will correspond to the price at which the common stock will trade in the public market subsequent to the offering or that an active trading market for the common stock will develop and continue after the offering.

Listing

We intend to apply to list our common stock on The NASDAQ Global Market under the trading symbol "GLYC."

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase, from time to time, in whole or in part, up to an aggregate of shares from us at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter's initial purchase commitment as indicated in the table above. This option may be exercised only if the underwriters sell more shares than the total number set forth on the cover page of this prospectus.

No Sales of Similar Securities

We, our officers, directors and holders of substantially all our outstanding capital stock and other securities have agreed, subject to specified exceptions, not to directly or indirectly:

- sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer, establish an open "put equivalent position" within the meaning of Rule 16a-1(h) under the Securities Exchange Act of 1934, as amended, or
- otherwise dispose of any shares of common stock, options or warrants to acquire shares of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock currently or hereafter owned either of record or beneficially, or
- publicly announce an intention to do any of the foregoing for a period of 180 days after the date of this prospectus without the prior written consent of Jefferies LLC and Barclays Capital Inc.

This restriction terminates after the close of trading of the common stock on and including the 180th day after the date of this prospectus.

Jefferies LLC and Barclays Capital Inc. may, in their sole discretion and at any time or from time to time before the termination of the 180-day period, release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our stockholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Stabilization

The underwriters have advised us that they, pursuant to Regulation M under the Securities Exchange Act of 1934, as amended, certain persons participating in the offering may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of the common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either “covered” short sales or “naked” short sales.

“Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares.

“Naked” short sales are sales in excess of the option to purchase additional shares of our common stock. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of shares of common stock on behalf of the underwriters for the purpose of fixing or maintaining the price of the common stock. A syndicate covering transaction is the bid for or the purchase of shares of common stock on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, the underwriters’ purchases to cover the syndicate short sales 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 may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

Neither we, nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

The underwriters may also engage in passive market making transactions in our common stock on The NASDAQ Global Market in accordance with Rule 103 of Regulation M during a period before the commencement of offers or sales of shares of our common stock in this offering 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.

Electronic Distribution

A prospectus in electronic format may be made available by e-mail or on the websites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a

specific number of shares of common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters' websites and any information contained in any other website maintained by any of the underwriters is not part of this prospectus, has not been approved or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and Relationships

The underwriters and certain of their affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and certain of their affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and certain of their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities or instruments issued by us and our affiliates. If the underwriters or their respective affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriters and their respective affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the common stock offered hereby. Any such short positions could adversely affect future trading prices of the common stock offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas, or publish or express independent research views in respect of such securities or instruments, and may at any time hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

Stamp Taxes

If you purchase shares of common stock offered in this prospectus, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus.

Disclaimers About Non-U.S. Jurisdictions

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the Relevant Implementation Date) it has not made and will not make an offer of shares to the public in that Relevant Member State prior to the publication of a prospectus in relation to the shares which 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 shares to the public in that Relevant Member State at any time:

(a) to legal entities which are authorised or regulated to operate in the financial markets or, if not so authorised or regulated, whose corporate purpose is solely to invest in securities;

(b) 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;

(c) to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the representatives for any such offer; or

(d) in any other circumstances which do not require the publication by the Issuer of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an “offer of shares to the public” in relation to any shares 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 shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, 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.

Each underwriter has represented and agreed that:

(a) 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 the FSMA) received by it in connection with the issue or sale of the shares in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and

(b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

The shares may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), or (ii) to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a “prospectus” within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the “SFA”), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries’ rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the shares under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law) and each underwriter has agreed that it will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus will be passed upon for us by Cooley LLP, Reston, Virginia. Certain legal matters in connection with this offering will be passed upon for the underwriters by Latham & Watkins LLP, San Diego, California.

EXPERTS

The financial statements of GlycoMimetics, Inc. at December 31, 2011 and 2012, and for each of the two years in the period ended December 31, 2012, and for the period from May 21, 2003 (date of inception) to December 31, 2012, appearing in this prospectus and registration statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and are included in reliance upon such report given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act, with respect to the shares of common stock being offered by this prospectus. This prospectus, which constitutes part of the registration statement, does not contain all of the information in the registration statement and its exhibits. For further information with respect to our company and the common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the internet at the SEC's website at *www.sec.gov*. You may also read and copy any document we file with the SEC at its public reference room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

Upon completion of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information will be available for inspection and copying at the public reference room and website of the SEC referred to above. We also maintain a website at *www.glycomimetics.com*, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of, and is not incorporated into, this prospectus.

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of
GlycoMimetics, Inc.

We have audited the accompanying balance sheets of GlycoMimetics, Inc. (a Development-Stage Enterprise) (the "Company") as of December 31, 2011 and 2012, and the related statements of operations and comprehensive income (loss), redeemable convertible preferred stock and stockholders' equity and cash flows for the years then ended, and the period from May 21, 2003 (inception) through December 31, 2012. 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 in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also 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.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of GlycoMimetics, Inc. at December 31, 2011 and 2012, and the results of its operations and its cash flows for the years then ended, and the period from May 21, 2003 (inception) through December 31, 2012, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

McLean, Virginia
August 16, 2013

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)
Balance Sheets

	DECEMBER 31,		PRO FORMA DECEMBER 31, 2012 (unaudited)
	2011	2012	
Assets			
Current assets:			
Cash and cash equivalents	$ 28,172,174	$ 17,372,832	
Prepaid expenses and other current assets	194,207	596,181	
Total current assets	28,366,381	17,969,013	
Property and equipment, net	234,502	450,759	
Other assets	308,521	—	
Total assets	$ 28,909,404	$ 18,419,772	
Liabilities and stockholders' equity			
Current liabilities:			
Accounts payable	$ 535,597	$ 764,195	
Accrued bonuses	241,705	338,257	
Accrued expenses	584,893	504,822	
Current portion of deferred rent	50,030	91,635	
Current portion of deferred revenue	15,000,000	3,992,649	
Total current liabilities	16,412,225	5,691,558	
Deferred rent	290,262	199,830	
Deferred revenue	3,750,000	—	
Stockholders' equity:			
Series A-1 Convertible Preferred Stock; $0.001 par value; 60,342,745 shares authorized; 30,726,326 shares issued and outstanding at December 31, 2011 and 2012, and no shares issued and outstanding at December 31, 2012 (Pro Forma)	30,726	30,726	$ —
Common stock; $0.001 par value; 70,258,276 authorized; 3,068,903 and 3,069,603 shares issued and outstanding at December 31, 2011 and 2012, respectively, and 33,795,929 shares issued and outstanding at December 31, 2012 (Pro Forma)	3,069	3,070	33,796
Additional paid-in capital	64,748,967	65,164,411	65,164,411
Deficit accumulated during the development stage	(56,325,845)	(52,669,823)	(52,669,823)
Total stockholders' equity	8,456,917	12,528,384	12,528,384
Total liabilities and stockholders' equity	$ 28,909,404	$ 18,419,772	$ 18,419,772

See accompanying notes.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Statements of Operations and Comprehensive Income (Loss)

	YEAR ENDED DECEMBER 31,		PERIOD FROM MAY 21, 2003 (DATE OF INCEPTION) TO DECEMBER 31,
	2011	2012	2012
Revenue	$ 3,813,913	$ 15,257,351	$ 19,602,114
Costs and expenses:			
Research and development	7,799,155	9,438,400	59,099,513
General and administrative	2,099,560	2,157,314	12,969,741
Total costs and expenses	9,898,715	11,595,714	72,069,254
Income (loss) from operations	(6,084,802)	3,661,637	(52,467,140)
Other income (expense):			
Interest income (expense), net	8,390	20,993	(173,232)
Other expense, net	(36,781)	(26,608)	(29,451)
Total other expense	(28,391)	(5,615)	(202,683)
Net income (loss) and comprehensive income (loss)	$ (6,113,193)	$ 3,656,022	$ (52,669,823)
Net income (loss) per share—basic	$ (1.99)	$ 1.19	
Net income (loss) per share—diluted	$ (1.99)	$ 0.10	
Weighted average shares outstanding—basic	3,066,253	3,069,603	
Weighted average shares outstanding—diluted	3,066,253	36,376,589	
Pro forma net income per share—basic (unaudited)		$ 0.11	
Pro forma net income per share—diluted (unaudited)		$ 0.10	
Pro forma weighted average shares outstanding—basic (unaudited)		33,795,929	
Pro forma weighted average shares outstanding—diluted (unaudited)		36,376,589	

See accompanying notes.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity

	REDEEMABLE CONVERTIBLE				STOCKHOLDERS' EQUITY						
	SERIES A PREFERRED STOCK		SERIES B PREFERRED STOCK		SERIES A-1 CONVERTIBLE PREFERRED STOCK		COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED DEFICIT DURING DEVELOPMENT STAGE	TOTAL STOCKHOLDERS' EQUITY
	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT			
Issuance of common stock to founders at inception	—	$ —	—	$ —	—	$ —	78,000	$ 78	$ 702	$ —	$ 780
Issuance of Series A Convertible Preferred Stock	931,500	9,064,795	—	—	—	—	—	—	—	—	—
Issuance of Series A Convertible Preferred Stock for services rendered	30,000	300,000	—	—	—	—	—	—	—	—	—
Issuance of Series A Convertible Preferred Stock for the purchase of assets	48,000	480,000	—	—	—	—	—	—	—	—	—
Net loss through December 31, 2004	—	—	—	—	—	—	—	—	—	(5,779,637)	(5,779,637)
Balance at December 31, 2004	1,009,500	9,844,795	—	—	—	—	78,000	78	702	(5,779,637)	(5,778,857)
Issuance of warrants	—	—	—	—	—	—	—	—	62,282	—	62,282
Net loss	—	—	—	—	—	—	—	—	—	(3,805,225)	(3,805,225)
Balance at December 31, 2005	1,009,500	9,844,795	—	—	—	—	78,000	78	62,984	(9,584,862)	(9,521,800)
Issuance of Series B Convertible Preferred Stock	—	—	1,974,340	15,350,818	—	—	—	—	—	—	—
Exercise of warrants	—	—	—	—	—	—	4,068	4	403	—	407
Stock-based compensation	—	—	—	—	—	—	—	—	22,470	—	22,470
Net loss	—	—	—	—	—	—	—	—	—	(4,741,892)	(4,741,892)
Balance at December 31, 2006	1,009,500	9,844,795	1,974,340	15,350,818	—	—	82,068	82	85,857	(14,326,754)	(14,240,815)
Stock-based compensation	—	—	—	—	—	—	—	—	46,345	—	46,345
Net loss	—	—	—	—	—	—	—	—	—	(7,306,089)	(7,306,089)
Balance at December 31, 2007	1,009,500	9,844,795	1,974,340	15,350,818	—	—	82,068	82	132,202	(21,632,843)	(21,500,559)
Issuance of warrants	—	—	—	—	—	—	—	—	143,618	—	143,618
Stock-based compensation	—	—	—	—	—	—	—	—	47,894	—	47,894
Net loss	—	—	—	—	—	—	—	—	—	(9,134,562)	(9,134,562)
Balance at December 31, 2008	1,009,500	9,844,795	1,974,340	15,350,818	—	—	82,068	82	323,714	(30,767,405)	(30,443,609)
Stock-based compensation	—	—	—	—	—	—	—	—	48,020	—	48,020
Issuance of Series A-1 Convertible Preferred Stock	—	—	—	—	30,726,326	30,726	—	—	38,774,329	—	38,805,055
Conversion of Series A and B Preferred Stock to common stock	(1,009,500)	(9,844,795)	(1,974,340)	(15,350,818)	—	—	2,983,835	2,984	25,192,629	—	25,195,613
Net loss	—	—	—	—	—	—	—	—	—	(10,063,362)	(10,063,362)
Balance at December 31, 2009	—	—	—	—	30,726,326	30,726	3,065,903	3,066	64,338,692	(40,830,767)	23,541,717
Stock-based compensation	—	—	—	—	—	—	—	—	34,031	—	34,031
Net loss	—	—	—	—	—	—	—	—	—	(9,381,885)	(9,381,885)
Balance at December 31, 2010	—	—	—	—	30,726,326	30,726	3,065,903	3,066	64,372,723	(50,212,652)	14,193,863
Exercise of options	—	—	—	—	—	—	3,000	3	1	—	4
Stock-based compensation	—	—	—	—	—	—	—	—	376,243	—	376,243
Net loss	—	—	—	—	—	—	—	—	—	(6,113,193)	(6,113,193)
Balance at December 31, 2011	—	—	—	—	30,726,326	30,726	3,068,903	3,069	64,748,967	(56,325,845)	8,456,917
Exercise of options	—	—	—	—	—	—	700	1	236	—	237
Stock-based compensation	—	—	—	—	—	—	—	—	415,208	—	415,208
Net income	—	—	—	—	—	—	—	—	—	3,656,022	3,656,022
Balance at December 31, 2012	—	$ —	—	$ —	30,726,326	$ 30,726	3,069,603	$ 3,070	$ 65,164,411	$ (52,669,823)	$ 12,528,384

See accompanying notes.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)
Statements of Cash Flows

	YEAR ENDED DECEMBER 31,		PERIOD FROM MAY 21, 2003 (DATE OF INCEPTION) TO DECEMBER 31,
	2011	2012	2012
Operating activities			
Net income (loss)	$ (6,113,193)	$ 3,656,022	$ (52,669,823)
Adjustments to reconcile net income (loss) to net cash (used in) provided by operating activities:			
Depreciation	83,861	99,923	1,005,914
Loss on retirement of property and equipment	—	—	172,584
Amortization of imputed interest on notes payable	—	—	19,200
Amortization of debt discount	—	—	205,899
Sales proceeds	—	—	3,531
Share-based compensation	376,243	415,208	990,211
Issuance of Series A Convertible Preferred Stock for services	—	—	300,000
Acquired in process research and development paid with Series A Convertible Preferred Stock and notes payable	—	—	660,802
Changes in assets and liabilities:			
Prepaid expenses and other current assets	69,935	(83,453)	(513,481)
Accounts payable	83,375	228,598	764,215
Accrued expenses	311,284	16,481	1,627,321
Deferred revenue	18,750,000	(14,757,351)	3,992,649
Deferred rent	291,679	(48,827)	291,465
Net cash provided by (used in) operating activities	13,853,184	(10,473,399)	(43,149,513)
Investing activities			
Restricted cash	(57,700)	(10,000)	(254,900)
Purchases of property and equipment	(182,438)	(316,180)	(1,460,376)
Net cash used in investing activities	(240,138)	(326,180)	(1,715,276)
Financing activities			
Proceeds from issuance of Convertible Preferred Stock, net of issuance costs	—	—	45,120,901
Proceeds from issuance of common stock	3	237	1,197
Proceeds from notes payable	—	—	18,488,929
Repayments of notes payable	(24,166)	—	(1,373,406)
Net cash (used in) provided by financing activities	(24,163)	237	62,237,621
Net increase (decrease) in cash and cash equivalents	13,588,883	(10,799,342)	17,372,832
Cash and cash equivalents, beginning of period	14,583,291	28,172,174	—
Cash and cash equivalents, end of period	$28,172,174	$ 17,372,832	$ 17,372,832
Supplemental disclosure of cash flow information			
Cash paid for interest	$ 624	$ —	$ 38,006
Supplemental schedule of noncash investing and financing activities			
Conversion of notes payable and accrued interest to Series A-1 Convertible Preferred Stock	$ —	$ —	$ 16,099,770
Notes payable issued for purchase of assets from GlycoTech Corporation and related party	—	—	200,000
Series A Convertible Preferred Stock issued from purchase of assets from GlycoTech Corporation and related party	—	—	480,000

See accompanying notes.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)
Notes to Financial Statements

1. Nature of Business

GlycoMimetics, Inc. (the Company), a Delaware corporation, is a clinical stage biotechnology company focused on the discovery and development of novel glycomimetic drugs to address unmet medical needs resulting from diseases in which carbohydrate biology plays a key role. Glycomimetics are molecules that mimic the structure of carbohydrates involved in important biological processes. Using its expertise in carbohydrate chemistry and knowledge of carbohydrate biology, the Company is developing a pipeline of proprietary glycomimetics that inhibit disease-related functions of carbohydrates, such as the roles they play in inflammation, cancer and infection. The Company was incorporated on April 4, 2003 and commenced operations on May 21, 2003. The Company is headquartered in Gaithersburg, Maryland.

The Company's executive personnel have devoted substantially all of their time to date to the planning and organization of the Company, the process of hiring scientists, initiating research and development programs and securing adequate capital for anticipated growth and operations. Accordingly, the Company is considered to be in the development stage as defined in Accounting Standards Codification (ASC) 915, *Development Stage Entities*.

The Company has incurred significant losses in the development of its product candidates, with the exception of the year ended December 31, 2012, in which it recognized net income of $3.7 million. The losses in prior periods were primarily attributable to the research and development of the Company's lead drug candidate, GMI-1070. The Company has not generated revenues from product sales. As a result, the Company has consistently reported negative cash flows from operating activities and net losses, had an accumulated deficit of $52,669,823 at December 31, 2012 and expects to continue incurring losses for the foreseeable future. The Company currently anticipates that its cash and cash equivalents will be sufficient to meet its anticipated cash requirements through the first quarter of 2014.

The Company's operations are subject to certain risks and uncertainties. The risks include the need to manage growth, the need to retain key personnel, the need to protect intellectual property, the availability of additional capital financing on terms acceptable to the Company and reliance on its collaboration with Pfizer. The Company's current operating assumptions and projections, which reflect management's best estimate of future revenue and operating expenses, indicate that anticipated operating expenditures through the first quarter of 2014 can be met by available working capital; however, the Company's ability to meet its projections is subject to uncertainties, and there can be no assurance that the Company's current projections will be accurate. If the Company's cash requirements are more than projected, the Company may require additional financing. The type, timing and terms of financing selected by the Company, if required, will be dependent upon the Company's cash needs, the availability of financing sources and the prevailing conditions in the financial markets. There can be no assurance that such financing will be available to the Company at any given time or available on favorable terms.

Management believes that the Company has access to capital resources through private investments of equity from its existing stockholders. However, it has not secured any commitment for new financing as of the date of this report, nor can it provide any assurance that new financing will be available on commercially acceptable terms, if at all. If the Company is unable to secure additional capital, it will be required to curtail its operations, and if these measures fail, it may not be able to continue its business. Curtailment of operations would cause significant delays in the Company's efforts to introduce its products to market, which is critical to the realization of its business plan and the future operations of the Company.

2. Summary of Significant Accounting Policies

Basis of Accounting

The accompanying financial statements were prepared based on the accrual method of accounting in accordance with U.S. generally accepted accounting principles (GAAP).

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (continued)

Unaudited Pro Forma Presentation

On August 14, 2013, the Company's board of directors authorized management of the Company to confidentially submit a registration statement to the Securities and Exchange Commission for the Company to sell shares of common stock to the public. The unaudited pro forma balance sheet information as of December 31, 2012 assumes the conversion of all outstanding shares of preferred stock as of that date into 30,726,326 shares of common stock.

The unaudited pro forma net income per share is computed using the weighted-average number of shares of common stock outstanding after giving pro forma effect to the conversion of all issued and outstanding shares of preferred stock during the year ended December 31, 2012 into shares of common stock as if such conversion had occurred at January 1, 2012.

Segment Information

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company views its operations and manages its business in one segment, which is the identification and development of glycomimetic compounds.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Although actual results could differ from those estimates, management does not believe that such differences would be material.

Cash and Cash Equivalents

Cash and cash equivalents consist of certificates of deposit and investment in money market funds with commercial banks and financial institutions. The Company considers all investments in highly liquid financial instruments with an original maturity of three months or less at the date of purchase to be cash equivalents. Cash equivalents are stated at amortized cost, plus accrued interest, which approximates fair value.

Restricted Cash

The Company is required to maintain certificates of deposit that serve as collateral for operating leases and credit card accounts. Amounts classified as restricted cash were $73,000 and $83,000 at December 31, 2011 and 2012, respectively, and are presented under prepaid expenses and other current assets.

Fair Value Measurements

The Company's financial instruments include cash and cash equivalents. The fair values of the financial instruments approximated their carrying values at December 31, 2011 and 2012, due to their short-term maturities. The Company accounts for recurring and nonrecurring fair value measurements in accordance with ASC 820, *Fair Value Measurements*. ASC 820 defines fair value, establishes a fair value hierarchy for assets and liabilities measured at fair value, and requires expanded disclosures about fair value measurements. The ASC hierarchy ranks the quality of reliability of inputs, or assumptions, used in the determination of fair value, and requires assets and liabilities carried at fair value to be classified and disclosed in one of the following three categories:

- Level 1—Fair value is determined by using unadjusted quoted prices that are available in active markets for identical assets and liabilities.
- Level 2—Fair value is determined by using inputs, other than Level 1 quoted prices, that are directly and indirectly observable. Inputs can include quoted prices for similar assets and liabilities in active markets or quoted prices for identical assets and liabilities in inactive markets. Related inputs can also include those used in valuation or other pricing models that can be corroborated by observable market data.

GLYCOMIMETICS, INC.
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Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (continued)

Fair Value Measurements (continued)

- Level 3—Fair value is determined by inputs that are unobservable and not corroborated by market data. Use of these inputs involves significant and subjective judgments to be made by a reporting entity. In instances where the determination of the fair value measurement is based on inputs from different levels of fair value hierarchy, the fair value measurement will fall within the lowest level input that is significant to the fair value measurement in its entirety.

The Company periodically evaluates financial assets and liabilities subject to fair value measurements to determine the appropriate level at which to classify them each reporting period. This determination requires the Company to make subjective judgments as to the significance of inputs used in determining fair value and where such inputs lie within the ASC 820 hierarchy.

The Company had no assets or liabilities that were measured using quoted prices for similar assets and liabilities or significant unobservable inputs (Level 2 and Level 3 assets and liabilities, respectively) as of December 31, 2011 and 2012. The carrying value of cash held in money market funds of approximately $28.1 million and $17.1 million as of December 31, 2011 and 2012, respectively, is included in cash and cash equivalents and approximates market values based on quoted market prices (Level 1 inputs).

Concentration of Credit Risk

Credit risk represents the risk that the Company would incur a loss if counterparties failed to perform pursuant to the terms of their agreements. Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash and cash equivalents. Cash and cash equivalents consist of certificates of deposit and money market funds with major financial institutions in the United States. These deposits and funds may be redeemed upon demand and, therefore, bear minimal risk. The Company does not anticipate any losses on such balances.

Property and Equipment

Property and equipment are recorded at cost and depreciated on a straight-line basis over estimated useful lives ranging from one to five years. Upon retirement or disposition of assets, the costs and related accumulated depreciation are removed from the accounts and any resulting gain or loss is included in the results of operations. Expenditures for repairs and maintenance are charged to operations as incurred; major replacements that extend the useful life are capitalized. Depreciation and amortization are computed using the straight-line method over the following estimated useful lives:

	ESTIMATED USEFUL LIVES
Furniture, fixtures, and equipment	2–5 years
Laboratory equipment	1–5 years
Office equipment	1–5 years
Computer equipment	1–5 years
Leasehold improvements	Shorter of lease term or useful life

Impairment of Long-Lived Assets

The Company periodically assesses the recoverability of the carrying value of its long-lived assets in accordance with the provisions of ASC 360, *Property, Plant, and Equipment*. ASC 360 requires that long-lived assets and certain identifiable intangible assets be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of the long-lived asset is measured by a

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (continued)

Impairment of Long-Lived Assets (continued)

comparison of the carrying amount of the asset to future undiscounted net cash flows expected to be generated by the asset. If the carrying value exceeds the sum of undiscounted cash flows, the Company then determines the fair value of the underlying asset. Any impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the estimated fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value, less costs to sell. As of December 31, 2011 and 2012, the Company determined that there were no impaired assets and had no assets held for sale.

Revenue Recognition

From time to time, the Company is awarded reimbursement contracts for services and development grant contracts with government and non-government entities and philanthropic organizations. Under these contracts, the Company typically is reimbursed for the costs in connection with specific development activities. The Company recognizes revenue to the extent of costs incurred in connection with performance under such grant arrangements.

The Company has entered into a collaborative research and development agreement with Pfizer Inc. (Pfizer). The agreement is in the form of a license agreement. The agreement called for a nonrefundable up-front payment and milestone payments upon achieving significant milestone events. The agreement also contemplates royalty payments on future sales of an approved product. There are no performance, cancellation, termination, or refund provisions in the arrangement that contain material financial consequences to the Company.

The primary deliverable under this arrangement is an exclusive worldwide license to the Company's GMI-1070 compound, but the arrangement also includes deliverables related to research and preclinical development activities to be performed by the Company on Pfizer's behalf.

Collaborative research and development agreements can provide for one or more of up-front license fees, research payments, and milestone payments. Agreements with multiple components (deliverables or items) are evaluated according to the provisions of ASC 605-25, *Revenue Recognition—Multiple-Element Arrangements*, to determine whether the deliverables can be separated into more than one unit of accounting. An item can generally be considered a separate unit of accounting if all of the following criteria are met: (1) the delivered item(s) has value to the customer on a stand-alone basis and (2) the arrangement includes a general right of return relative to the delivered item(s), and delivery or performance of the undelivered item(s) is considered probable and substantially in control of the Company. Items that cannot be divided into separate units are combined with other units of accounting, as appropriate. Consideration received is allocated among the separate units based on selling price hierarchy. The selling price hierarchy for each deliverable is based on (i) vendor-specific objective evidence (VSOE), if available; (ii) third-party evidence (TPE) of selling price if VSOE is not available; or (iii) an estimated selling price, if neither VSOE nor third-party evidence is available. Management was not able to establish VSOE or TPE for separate unit deliverables, as the Company does not have a history of entering such arrangements or selling the individual deliverables within such arrangements separately. In addition, there may be significant differentiation in these arrangements, which indicates that comparable third-party pricing may not be available. Management determined that the selling price for the deliverables within the Pfizer collaboration agreement should be determined using its best estimate of selling price. The process of determining the best estimate of selling price involved significant judgment on the Company's part and included consideration of multiple factors such as estimated direct expenses, other costs, and available clinical development data.

The Company adopted the aforementioned accounting standard for multiple-element arrangements effective January 1, 2011. Pursuant to this standard, each required deliverable under the Pfizer collaboration agreement is evaluated to determine whether it qualifies as a separate unit of accounting. Factors considered in this determination include the research capabilities of Pfizer, the proprietary nature of the license and know-how, and the availability of the Company's glycomimetics technology research expertise in the general marketplace. Based on

GLYCOMIMETICS, INC.
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Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (continued)

Revenue Recognition (continued)

all relevant facts and circumstances and, most significantly, on the proprietary nature of the Company's technology and the related proprietary nature of the Company's research services, management concluded that stand-alone value does not exist for the license, and therefore, the license is not a separate unit of accounting under the contract and will be combined with the research and development services (including participation on a joint steering committee).

As such, the up-front payment received of $22.5 million is being recognized as revenue over the expected development period. The determination of the length of the period over which to defer revenue and the methodology by which to recognize the related revenues is subject to judgment and estimation. Consistent with the research plan developed by and agreed to by both parties, management estimates that the research activities and participation on the joint steering committees will occur over a 1.5-year period. Revenues associated with the up-front license fee are recognized over this period using a straight-line method, which is consistent with expected completion of the research services.

Effective January 1, 2011, the Company also adopted ASC 605-28, *Revenue Recognition—Milestone Method*. Under this guidance, the Company may recognize revenue contingent upon the achievement of a substantive milestone in its entirety in the period the milestone is achieved. Milestones are considered substantive if all of the following conditions are met: (1) the milestone is nonrefundable; (2) achievement of the milestone was not reasonably assured at the inception of the arrangement; (3) substantive effort is involved to achieve the milestone; (4) the amount of the milestone appears reasonable in relation to the effort expended or the risk associated with achievement of the milestone; and (5) a reasonable amount of time passes between the up-front license payment and the first milestone payment, as well as between each subsequent milestone payment.

Determination as to whether a payment meets the aforementioned conditions involves management's judgment. If any of these conditions are not met, the resulting payment would not be considered a substantive milestone and, therefore, the resulting payment would be considered part of the consideration for the single unit of accounting and would be recognized as revenue in accordance with the revenue models described above. In addition, the determination that one such payment was not a substantive milestone could prevent the Company from concluding that subsequent milestone payments were substantive milestones and, as a result, any additional milestone payments could also be considered part of the consideration for the single unit of accounting and would be recognized as revenue as such performance obligations are performed under either the proportional performance or straight-line methods, as applicable.

The Company concluded that the milestones under the Pfizer agreement are substantive because of the uncertainty of future clinical development success and the additional effort and time that is expected before the milestones will be achieved.

Research and Development Costs

Except for payments made in advance of services, research and development costs are expensed as incurred. For payments made in advance, the Company recognizes research and development expense as the services are rendered. Research and development costs primarily consist of salaries and related expenses for personnel, laboratory supplies and raw materials, sponsored research, depreciation of laboratory facilities and leasehold improvements, and utilities costs related to research space. Other research and development expenses include fees paid to consultants and outside service providers.

Stock-Based Compensation

Stock-based payments are accounted for in accordance with the provisions of ASC 718, *Compensation—Stock Compensation*. The fair value of stock-based payments is estimated, on the date of grant, using the Black-Scholes

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (continued)

Stock-Based Compensation (continued)

model. The resulting fair value is recognized ratably over the requisite service period, which is generally the vesting period of the option.

The Company has elected to use the Black-Scholes-Merton option pricing model to value any options granted. The Company will reconsider use of the Black-Scholes-Merton model if additional information becomes available in the future that indicates another model would be more appropriate or if grants issued in future periods have characteristics that prevent their value from being reasonably estimated using this model.

A discussion of management's methodology for developing some of the assumptions used in the valuation model follows:

Fair Value of Common Stock—Given the lack of an active public market for the common stock, the Company has from time to time engaged an independent valuation firm to determine the fair value of the common stock. In the absence of a public trading market, and as a clinical-stage company with no significant revenues, the Company believes that it is appropriate to consider a range of factors to determine the fair market value of the common stock at each grant date. In determining the fair value of its common stock, the Company uses methodologies, approaches, and assumptions consistent with the American Institute of Certified Public Accountants' (AICPA) Audit and Accounting Practice Aid Series: *Valuation of Privately Held Company Equity Securities Issued as Compensation* (the AICPA Practice Guide). In addition, the Company considered various objective and subjective factors, along with input from the independent third-party valuation firm. The factors included (1) the achievement of clinical and operational milestones by the Company; (2) the status of strategic relationships with collaborators; (3) the significant risks associated with the Company's stage of development; (4) capital market conditions for life science companies, particularly similarly situated, privately held, early-stage life science companies; (5) the Company's available cash, financial condition, and results of operations; (6) the most recent sales of the Company's preferred stock; and (7) the preferential rights of the outstanding preferred stock.

Expected Dividend Yield—The Company has never declared or paid dividends and has no plans to do so in the foreseeable future.

Expected Volatility—Volatility is a measure of the amount by which a financial variable such as share price has fluctuated (historical volatility) or is expected to fluctuate (expected volatility) during a period. The Company does not maintain an internal market for its shares, and its shares are not traded publicly. The Company has been able to identify several public entities of similar size, complexity, and stage of development; accordingly, historical volatility has been calculated using the volatility of these companies.

Risk-Free Interest Rate—This is the U.S. Treasury rate for the week of each option grant during the year, having a term that most closely resembles the expected life of the option.

Expected Term—This is a period of time that the options granted are expected to remain unexercised. Options granted have a maximum term of 10 years. The Company estimates the expected life of the option term to be 6.25 years. The Company uses a simplified method to calculate the average expected term.

Expected Forfeiture Rate—The forfeiture rate is the estimated percentage of options granted that is expected to be forfeited or canceled on an annual basis before becoming fully vested. The Company estimates the forfeiture rate based on turnover data with further consideration given to the class of the employees to whom the options were granted.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (continued)

Stock-Based Compensation (continued)

Equity instruments issued to nonemployees are accounted for under the provisions of ASC 718, *Compensation—Stock Compensation*, and ASC 505-50, *Equity—Equity-Based Payments to Non-Employees*. Accordingly, the estimated fair value of the equity instrument is recorded on the earlier of the performance commitment date or the date the services are completed and are marked to market during the service period.

Income Taxes

The Company accounts for income taxes using the asset and liability method in accordance with ASC 740, *Income Taxes*. Deferred income taxes are recognized for the tax consequences in future years of differences between the tax bases of assets and liabilities and the financial reporting amounts at each year-end based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. A valuation allowance is established when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company accounts for uncertain tax positions pursuant to ASC 740. Financial statement recognition of a tax position taken or expected to be taken in a tax return is determined based on a more-likely-than-not threshold of that tax position being sustained. If the tax position meets this threshold, the benefit to be recognized is measured as the tax benefit having the highest likelihood of being realized upon ultimate settlement with the taxing authority. The Company recognizes interest accrued related to unrecognized tax benefits and penalties in the provision for income taxes.

Comprehensive Income (Loss)

Effective January 1, 2012, the Company adopted Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) 2011-05, *Presentation of Comprehensive Income*, which requires the presentation of the comprehensive income (loss) and its components, as part of the financial statements. Comprehensive income (loss) comprises net income (loss) and other changes in equity that are excluded from net income (loss). For the years ended December 31, 2011 and 2012, and for the period from May 21, 2003 (date of inception) to December 31, 2012, the Company's net income (loss) equals comprehensive income (loss) and, accordingly, no additional disclosure is presented.

Recently Issued Accounting Pronouncements Adopted

In May 2011, the FASB issued ASU 2011-04, *Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs*, which amended ASC 820 to achieve common fair value measurements and disclosure requirements in GAAP and International Financial Reporting Standards (IFRS). The amendments in ASU 2011-05 result in common fair value measurement and disclosure requirements in GAAP and IFRS.

Consequently, the amendments change the wording used to describe many of the requirements in GAAP for measuring fair value and for disclosing information about fair value measurements. This amendment was effective for fiscal years beginning after December 15, 2011. The adoption of this amendment did not have a material impact on the Company's financial statements for the year ended December 31, 2012.

GLYCOMIMETICS, INC.
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Notes to Financial Statements (Continued)

3. Net Income (Loss) Per Share of Common Stock

The following table sets forth the computation of basic and diluted earnings per share for the years ended December 31, 2011 and 2012:

	2011	2012
Net income (loss)	$(6,113,193)	$ 3,656,022
Income (loss) per share—basic	$ (1.99)	$ 1.19
Income (loss) per share—diluted	$ (1.99)	$ 0.10
Weighted-average number of shares—basic	3,066,253	3,069,603
Weighted-average number of shares—diluted	3,066,253	36,376,589

The following potentially dilutive securities outstanding at December 31, 2011 and 2012 have been excluded from the computation of diluted weighted average shares outstanding, as they would be anti-dilutive:

	2011	2012
Warrants	2,097,625	5,100
Stock options	4,354,153	252,852
Convertible preferred stock	30,726,326	—

4. Property and Equipment

Property and equipment consisted of the following at December 31:

	2011	2012
Furniture, fixtures, and equipment	$ 106,291	$ 106,291
Laboratory equipment	651,563	900,837
Office equipment	22,421	22,421
Computer equipment	134,201	177,317
Leasehold improvements	16,287	40,077
	930,763	1,246,943
Less accumulated depreciation	(696,261)	(796,184)
	$ 234,502	$ 450,759

Depreciation of property and equipment totaled $83,861 and $99,923 for the years ended December 31, 2011 and 2012, respectively, and $1,005,914 cumulatively for the period from May 21, 2003 (date of inception) to December 31, 2012.

5. Operating Leases

The Company leases its office and research space under a five-year operating lease that is subject to escalation clauses. In connection with its lease arrangement, the Company received a rent abatement as a lease incentive. The rent abatement has been recognized as deferred rent that will be adjusted on a straight-line basis over the term of the lease. Deferred rent was $340,292 and $291,465 at December 31, 2011 and 2012, respectively. Total rent

GLYCOMIMETICS, INC.
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Notes to Unaudited Financial Statements (Continued)

5. Operating Leases (continued)

expense was $291,679 for 2011, $321,140 for 2012, and $2,387,245 for the period from May 21, 2003 (date of inception) to December 31, 2012.

The following table presents the future minimum lease payments as of December 31, 2012 under the Company's lease for operating space:

YEAR	AMOUNT
2013	$ 415,286
2014	427,744
2015	365,445
Total	$ 1,208,475

6. Stockholders' Equity

Convertible Preferred Stock

Series A-1 Convertible Preferred Stock

On October 20, 2009, the Company entered into a Series A-1 Preferred Stock Purchase Agreement with certain investors. In connection with the financing, the Company issued 30,726,326 shares of Series A-1 Convertible Preferred Stock for an aggregate amount of $38,979,412, which included the conversion of principal and accrued interest related to an earlier bridge financing of $16,099,770. In connection with the Series A-1 Preferred Stock financing, all then-outstanding shares of Series A and Series B Preferred Stock were converted into common stock, and all then outstanding warrants to purchase Series B Preferred Stock were converted into warrants to purchase common stock. Immediately prior to the Series A-1 Preferred Stock financing, the Company effected a 1-for-10 reverse stock split of the outstanding common stock. All prior-period applicable share amounts have been retroactively adjusted to reflect the reverse stock split. As of December 31, 2012, the Company's Amended and Restated Certificate of Incorporation authorized the issuance of 130,601,021 shares of stock, of which 70,258,276 are designated as common stock with a par value of $0.001, and of which 60,342,745 are designated as Series A-1 Convertible Preferred Stock with a par value of $0.001.

Voting Rights and Dividends

The holder of each share of Series A-1 Convertible Preferred Stock has the right to one vote for each share of common stock into which the shares of Series A-1 Convertible Preferred Stock held by the holder are then convertible. The holder has full voting rights and powers equal to the voting rights and powers of a holder of common stock. As long as any shares of Series A-1 Convertible Preferred Stock remain outstanding, the holders of such shares are entitled to elect five directors of the Company. The holders of shares of Series A-1 Convertible Preferred Stock are entitled to receive dividends when, as, and if declared by the Board of Directors at a rate of $0.1015 per share per annum. Dividends are not cumulative.

Liquidation

In the event of a liquidation of the Company, the holders of shares of Series A-1 Convertible Preferred Stock are entitled to receive, prior and in preference to any other series or class of capital stock, an amount equal to the greater of (i) an amount per share equal to the Original Issue Price of $1.2686 plus an amount equal to all declared but unpaid dividends thereon, or (ii) an amount per share equal to the amount per share such holder would have received upon a liquidation event had each holder of Series A-1 Convertible Preferred Stock converted such shares into common stock immediately prior to the liquidation event.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Notes to Financial Statements (Continued)

6. Stockholders' Equity (continued)

Convertible Preferred Stock (continued)

Conversion

The Series A-1 Convertible Preferred Stock is convertible into common shares at the election of the stockholder at any time. The number of shares of common stock a holder of Series A-1 Convertible Preferred Stock will receive is equal to the number of shares of Series A-1 Convertible Preferred Stock multiplied by the conversion rate. As of December 31, 2012, the conversion rate for the Series A-1 Convertible Preferred Stock was one-for-one. The conversion rate may be adjusted for certain anti-dilutive events. All outstanding shares of Series A-1 Convertible Preferred Stock shall automatically convert to shares of common stock upon an initial public offering of at least $36 million and per share price of $3.80, subject to adjustment as set forth in the Amended and Restated Certificate of Incorporation.

Common Stock

As of December 31, 2011 and 2012, there were 70,258,276 shares of common stock authorized to be issued. Certain of the outstanding shares of common stock are subject to stock restriction agreements (a Restriction Agreement). Pursuant to a Restriction Agreement, a stockholder shall not sell, assign, transfer, or otherwise dispose of any shares except to the Company or as expressly provided in the Restriction Agreement.

Warrants to Acquire Company Stock

On October 13, 2006, the Company issued a warrant to purchase 5,100 shares of common stock at an exercise price of $7.845 per share to a commercial bank. This warrant, which was originally issuable for Series B Preferred Stock prior to the conversion of Series B Preferred Stock to common stock in 2009, was vested upon issuance and expires in October 2016. The fair value of the warrant, which was de minimis, was calculated using the Black-Scholes option pricing model.

As part of the issuance of convertible unsecured promissory notes, the Company issued warrants to purchase an aggregate of 2,097,625 shares of common stock.

The following common stock warrants were outstanding as of December 31, 2011 and 2012:

NUMBER OF SHARES UNDERLYING WARRANTS	EXERCISE PRICE PER SHARE	EXPIRATION DATE
985,339	$ 0.10	July 18, 2018
997,163	0.10	January 16, 2019
56,277	0.10	December 9, 2015
50,356	0.10	January 30, 2019
3,390	0.10	December 16, 2015
5,100	7.85	October 13, 2016

No warrants were exercised or expired during the years ended December 31, 2011 and 2012.

Stock Incentive Plan

The 2003 Stock Incentive Plan (the Plan) provides for the grant of incentives and nonqualified stock options and restricted stock awards. The exercise price for incentive stock options must be at least equal to the fair value of the common stock on the grant date. Unless otherwise stated in a stock option agreement, 25% of the shares subject to an option grant will vest upon the first anniversary of the vesting start date and thereafter at the rate of one forty-eighth of the option shares per month as of the first day of each month after the first anniversary. Upon termination of employment by reasons other than death, cause, or disability, any vested options shall terminate 60 days after the

GLYCOMIMETICS, INC.
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Notes to Financial Statements (Continued)

6. Stockholders' Equity (continued)

Stock Incentive Plan (continued)

termination date. Stock options terminate 10 years from the date of grant. As of December 31, 2012, the Company had reserved 5,029,003 shares of common stock for issuance under the Plan.

A summary of the Company's stock option activity for the year ended December 31, 2012 is as follows:

	OUTSTANDING OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE
Outstanding as of January 1, 2012	4,354,153	$ 0.34
Options granted	552,135	0.60
Options exercised	(700)	0.34
Options forfeited	(1,500)	0.34
Outstanding as of December 31, 2012	4,904,088	0.36
Vested or expected to vest as of December 31, 2012	4,766,423	0.36
Exercisable as of December 31, 2012	3,531,942	0.34

The weighted-average remaining contractual term of stock options that are outstanding and exercisable as of December 31, 2012 was 6.25 years.

The weighted-average fair value of the options granted during the years ended December 31, 2011 and 2012 was $0.27 and $0.46 per share, respectively, applying the Black-Scholes option pricing model utilizing the following weighted-average assumptions:

	2011	2012
Expected term	6.25 years	6.25 years
Expected volatility	102.41%	94.77%
Risk-free interest rate	1.31%	0.60%
Expected dividend yield	0%	0%

As of December 31, 2012, there was $498,702 of total unrecognized compensation expense related to unvested options that will be recognized over a weighted-average period of approximately one year. Total intrinsic value of the options exercised during the years ended December 31, 2011 and 2012 was not material. The total fair value of shares vested in the years ended December 31, 2011 and 2012, was $275,517 and $313,504, respectively.

Stock-based compensation expense was recognized as follows for the years ended December 31:

	2011	2012
Research and development	$168,565	$191,121
General and administrative expense	207,678	224,087
Total	$376,243	$415,208

GLYCOMIMETICS, INC.
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Notes to Financial Statements (Continued)

7. Income Taxes

The components of the gross deferred tax asset and related valuation allowance at December 31 were as follows:

	2011	2012
Deferred tax assets:		
Net operating loss carryforward	$ 15,960,457	$ 13,257,746
Capitalized start-up costs	4,097,443	3,819,650
Patent amortization	327,077	304,902
Research and development credits	3,329,190	3,329,190
Advanced payments	—	1,479,188
Depreciation	6,722	—
Deferred rent	134,228	114,968
Deferred compensation	229,068	392,847
Other	35,206	32,309
Total gross deferred tax assets	24,119,391	22,730,800
Valuation allowance	(24,103,048)	(22,656,888)
Deferred tax assets	16,343	73,912
Deferred tax liabilities:		
Prepaid insurance	(16,343)	(13,895)
Depreciation	—	(60,017)
Total deferred tax liabilities	(16,343)	(73,912)
Net deferred tax assets	$ —	$ —

Based on the Company's limited operating history and management's expectation regarding future profitability, management believes the realization of the Company's deferred tax assets does not meet the more-likely-than-not criteria under ASC 740, *Income Taxes*. Accordingly, a full valuation allowance has been established as of December 31, 2011 and 2012.

As of December 31, 2012, the Company had $33,610,712 of U.S. net operating losses and $3,329,190 of research and development tax credits available to carry forward. A portion of these tax attribute carryforwards will begin to expire in 2023.

The Company files income tax returns in the U.S. federal jurisdiction and in the State of Maryland. The Company's federal income tax returns for tax years 2003 and after remain subject to examination by the U.S. Internal Revenue Service. The Company's Maryland income tax returns for the tax years 2006 and thereafter remain subject to examination by the Comptroller of Maryland. In addition, all of the net operating losses and research and development tax credit carryforwards that may be used in future years are still subject to adjustment.

GLYCOMIMETICS, INC.
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Notes to Financial Statements (Continued)

7. Income Taxes (continued)

The Company did not have unrecognized tax benefits as of December 31, 2012, and does not anticipate this to change significantly over the next 12 months. The Company will recognize interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense. Reconciliations between the statutory federal income tax rate and the effective income tax rate of income tax expense is as follows as of December 31:

	2011	2012
U.S. Federal statutory tax rate	34.0%	34.0%
State taxes	5.0	5.5
Research credit	5.0	0.0
Other	0.0	0.1
Change in valuation allowance	(44.0)	(39.6)
Provision for income taxes	0.0%	0.0%

Under the Internal Revenue Code, certain substantial changes in the Company's ownership may result in a limitation on the amount of net operating loss carryforwards and research and development tax credit carryforwards that can be used in future years. The Company has not completed an analysis under Internal Revenue Code Sections 382 and 383; therefore, the Company's net operating loss carryforwards and research and development tax credits may be limited for use in a future annual period.

8. Research and License Agreements

In February 2004, the Company entered into a research agreement (the Research Agreement) with the University of Basel (the University) for biological evaluation of selectin antagonists. Certain patents covering the GMI-1070 compound are subject to provisions of the Research Agreement.

Under the terms of the Research Agreement, the Company will owe a 10% payment to the University for all future milestone and royalty payments received from Pfizer with respect to GMI-1070.

In October 2011, the Company and Pfizer entered into a licensing agreement (the Pfizer Agreement) that provides Pfizer an exclusive worldwide license to GMI-1070 for vaso-occlusive crisis associated with sickle cell disease and for other diseases for which the drug candidate may be developed. The Company was responsible for completion of the Phase 2 trial, after which Pfizer will assume all further development and commercialization responsibilities. Upon execution of the Pfizer Agreement, the Company received an up-front payment of $22.5 million. The Pfizer Agreement also provides potential development, regulatory and sales-based milestone payments of up to $320.0 million in the aggregate. The Company is also eligible to receive royalties on future sales contingent upon annual net sales thresholds. In addition, the Company and Pfizer have formed a joint steering committee that will oversee and coordinate activities as set forth in the research program. The $22.5 million up-front payment is being recognized over a period of 1.5 years. During the years ended December 31, 2011 and 2012, the Company recorded revenue of $3.8 million and $15.0 million, respectively, pursuant to the Pfizer Agreement in the Company's statement of operations. At December 31, 2011 and 2012, $18.8 million and $3.8 million of revenue was deferred under this agreement. As of December 31, 2012, no milestones related to this arrangement have been earned or recognized.

Pfizer has the right to terminate the Agreement by giving prior written notice. As of December 31, 2012, Pfizer and the Company are both in compliance with the provisions of the Agreement.

In 2011 and 2012, under this arrangement the Company incurred a total of $960,000 and $3,305,000, respectively, in research and development expenses.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Notes to Financial Statements (Continued)

9. Government Contracts and Other Grants

In May 2012, the Company and International AIDS Vaccine Initiative, Inc. entered into a grant agreement to develop rationally designed anti-HIV immunogens to be used in developing a vaccine.

Upon execution of the grant agreement, the Company received an up-front payment of $500,000. The Company recognizes revenue under government contracts and grants when the work is performed or the expenses are incurred. Any amounts received in advance of performance are recorded as deferred revenue until earned.

In 2012, under this arrangement the Company incurred expenses and recognized revenue of $257,351.

10. Subsequent Events

The Company has evaluated subsequent events through August 16, 2013, the date on which the financial statements were issued.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Balance Sheets

	DECEMBER 31, 2012	JUNE 30, 2013 (unaudited)	PRO FORMA JUNE 30, 2013 (unaudited)
Assets			
Current assets:			
Cash and cash equivalents	$ 17,372,832	$ 10,777,982	
Prepaid expenses and other current assets	596,181	358,630	
Total current assets	17,969,013	11,136,612	
Property and equipment, net	450,759	416,935	
Other assets	—	—	
Total assets	$ 18,419,772	$ 11,553,547	
Liabilities and stockholders' equity			
Current liabilities:			
Accounts payable	$ 764,195	$ 538,794	
Accrued bonuses	338,257	213,305	
Accrued expenses	504,822	686,096	
Current portion of deferred rent	91,635	97,834	
Current portion of deferred revenue	3,992,649	129,984	
Total current liabilities	5,691,558	1,666,013	
Deferred rent	199,830	149,330	
Stockholders' equity:			
Series A-1 Convertible Preferred Stock; $0.001 par value; 60,342,745 shares authorized; 30,726,326 shares issued and outstanding at December 31, 2012 and June 30, 2013 and no shares issued and outstanding at June 30, 2013 (Pro Forma)	30,726	30,726	$ —
Common stock; $0.001 par value; 70,258,276 authorized; 3,069,603 shares and 3,127,693 shares issued and outstanding at December 31, 2012 and June 30, 2013, respectively and 33,854,019 shares issued and outstanding at June 30, 2013 (Pro Forma)	3,070	3,128	33,854
Additional paid-in capital	65,164,411	65,401,777	65,401,777
Deficit accumulated during the development stage	(52,669,823)	(55,697,427)	(55,697,427)
Total stockholders' equity	12,528,384	9,738,204	9,738,204
Total liabilities and stockholders' equity	$ 18,419,772	$ 11,553,547	$ 11,553,547

See accompanying notes.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Statements of Operations and Comprehensive Income (Loss)

	SIX MONTHS ENDED JUNE 30,		PERIOD FROM MAY 21, 2003 (DATE OF INCEPTION) TO JUNE 30, 2013
	2012	2013	
	(unaudited)		(unaudited)
Revenue	$ 7,541,853	$ 3,862,665	$ 23,464,779
Costs and expenses:			
Research and development	4,255,978	5,624,037	64,723,550
General and administrative	1,089,508	1,262,987	14,232,728
Total costs and expenses	5,345,486	6,887,024	78,956,278
Income (loss) from operations	2,196,367	(3,024,359)	(55,491,499)
Other income (expense):			
Interest income expense, net	12,028	865	(172,367)
Other expense, net	(13,020)	(4,110)	(33,561)
Total other expense	(992)	(3,245)	(205,928)
Net income (loss) and comprehensive income (loss)	$ 2,195,375	$ (3,027,604)	$ (55,697,427)
Net income (loss) per share—basic	$ 0.72	$ (0.98)	
Net income (loss) per share—diluted	$ 0.06	$ (0.98)	
Weighted average shares outstanding—basic	3,069,603	3,095,925	
Weighted average shares outstanding—diluted	36,383,159	3,095,925	
Pro forma net (loss) per share—basic and diluted (unaudited)		$ (0.09)	
Pro forma weighted average shares outstanding—basic and diluted (unaudited)		33,822,251	

See accompanying notes.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity

	REDEEMABLE CONVERTIBLE				STOCKHOLDERS' EQUITY						
	SERIES A PREFERRED STOCK		SERIES B PREFERRED STOCK		SERIES A-1 CONVERTIBLE PREFERRED STOCK		COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED DEFICIT DURING DEVELOPMENT STAGE	TOTAL STOCKHOLDERS' EQUITY
	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT			
Issuance of common stock to founders at inception	–	$ –	–	$ –	–	$ –	78,000	$ 78	$ 702	$ –	$ 780
Issuance of Series A Convertible Preferred Stock	931,500	9,064,795	–	–	–	–	–	–	–	–	–
Issuance of Series A Convertible Preferred Stock for services rendered	30,000	300,000	–	–	–	–	–	–	–	–	–
Issuance of Series A Convertible Preferred Stock for the purchase of assets	48,000	480,000	–	–	–	–	–	–	–	–	–
Net loss through December 31, 2004	–	–	–	–	–	–	–	–	–	(5,779,637)	(5,779,637)
Balance at December 31, 2004	1,009,500	9,844,795	–	–	–	–	78,000	78	702	(5,779,637)	(5,778,857)
Issuance of warrants	–	–	–	–	–	–	–	–	62,282	–	62,282
Net loss	–	–	–	–	–	–	–	–	–	(3,805,225)	(3,805,225)
Balance at December 31, 2005	1,009,500	9,844,795	–	–	–	–	78,000	78	62,984	(9,584,862)	(9,521,800)
Issuance of Series B Convertible Preferred Stock	–	–	1,974,340	15,350,818	–	–	–	–	–	–	–
Exercise of warrants	–	–	–	–	–	–	4,068	4	403	–	407
Stock-based compensation	–	–	–	–	–	–	–	–	22,470	–	22,470
Net loss	–	–	–	–	–	–	–	–	–	(4,741,892)	(4,741,892)
Balance at December 31, 2006	1,009,500	9,844,795	1,974,340	15,350,818	–	–	82,068	82	85,857	(14,326,754)	(14,240,815)
Stock-based compensation	–	–	–	–	–	–	–	–	46,345	–	46,345
Net loss	–	–	–	–	–	–	–	–	–	(7,306,089)	(7,306,089)
Balance at December 31, 2007	1,009,500	9,844,795	1,974,340	15,350,818	–	–	82,068	82	132,202	(21,632,843)	(21,500,559)
Issuance of Warrant	–	–	–	–	–	–	–	–	143,618	–	143,618
Stock-based compensation	–	–	–	–	–	–	–	–	47,894	–	47,894
Net loss	–	–	–	–	–	–	–	–	–	(9,134,562)	(9,134,562)
Balance at December 31, 2008	1,009,500	9,844,795	1,974,340	15,350,818	–	–	82,068	82	323,714	(30,767,405)	(30,443,609)
Stock-based compensation	–	–	–	–	–	–	–	–	48,020	–	48,020
Issuance of Series A-1 Convertible Preferred Stock	–	–	–	–	30,726,326	30,726	–	–	38,774,329	–	38,805,055
Conversion of Series A and B Preferred Stock to common stock	(1,009,500)	(9,844,795)	(1,974,340)	(15,350,818)	–	–	2,983,835	2,984	25,192,629	–	25,195,613
Net loss	–	–	–	–	–	–	–	–	–	(10,063,362)	(10,063,362)
Balance at December 31, 2009	–	–	–	–	30,726,326	30,726	3,065,903	3,066	64,338,692	(40,830,767)	23,541,717
Stock-based compensation	–	–	–	–	–	–	–	–	34,031	–	34,031
Net loss	–	–	–	–	–	–	–	–	–	(9,381,885)	(9,381,885)
Balance at December 31, 2010	–	–	–	–	30,726,326	30,726	3,065,903	3,066	64,372,723	(50,212,652)	14,193,863
Exercise of options	–	–	–	–	–	–	3,000	3	1	–	4
Stock-based compensation	–	–	–	–	–	–	–	–	376,243	–	376,243
Net loss	–	–	–	–	–	–	–	–	–	(6,113,193)	(6,113,193)
Balance at December 31, 2011	–	–	–	–	30,726,326	30,726	3,068,903	3,069	64,748,967	(56,325,845)	8,456,917
Exercise of options	–	–	–	–	–	–	700	1	236	–	237
Stock-based compensation	–	–	–	–	–	–	–	–	415,208	–	415,208
Net income	–	–	–	–	–	–	–	–	–	3,656,022	3,656,022
Balance at December 31, 2012	–	–	–	–	30,726,326	30,726	3,069,603	3,070	65,164,411	(52,669,823)	12,528,384
Exercise of options (unaudited)	–	–	–	–	–	–	58,090	58	19,692	–	19,750
Stock-based compensation (unaudited)	–	–	–	–	–	–	–	–	217,674	–	217,674
Net loss (unaudited)	–	–	–	–	–	–	–	–	–	(3,027,604)	(3,027,604)
Balance at June 30, 2013	–	$ -	–	$ -	30,726,326	$ 30,726	3,127,693	$ 3,128	$ 65,401,777	$ (55,697,427)	$ 9,738,204

See accompanying notes.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Statements of Cash Flows

	SIX MONTHS ENDED JUNE 30,		PERIOD FROM MAY 21, 2003 (DATE OF INCEPTION) TO JUNE 30, 2013
	2012	2013	
	(unaudited)		(unaudited)
Operating activities			
Net income (loss)	$ 2,195,375	$ (3,027,604)	$ (55,697,427)
Adjustments to reconcile net income (loss) to net cash used in operating activities:			
Depreciation	43,288	64,317	1,070,231
Loss on retirement of property and equipment	—	—	172,584
Amortization of imputed interest on notes payable	—	—	19,200
Amortization of debt discount	—	—	205,899
Sales proceeds	—	—	3,531
Compensation expense from stock option grants	203,138	217,674	1,207,885
Issuance of Series A Convertible Preferred Stock for services	—	—	300,000
Acquired in process research and development paid with Series A Convertible Preferred Stock and notes payable	—	—	660,802
Changes in assets and liabilities:			
Prepaid expenses and other current assets	(174,036)	237,551	(275,930)
Accounts payable	(46,351)	(225,401)	538,814
Accrued expenses	(348,818)	56,322	1,683,643
Deferred revenue	(7,041,853)	(3,862,665)	129,984
Deferred rent	(8,093)	(44,301)	247,164
Net cash used in operating activities	(5,177,350)	(6,584,107)	(49,733,620)
Investing activities			
Restricted cash	(10,000)	—	(254,900)
Purchases of property and equipment	(172,247)	(30,492)	(1,490,868)
Net cash used in investing activities	(182,247)	(30,492)	(1,745,768)
Financing activities			
Proceeds from issuance of Convertible Preferred Stock, net of issuance costs	—	—	45,120,901
Proceeds from issuance of common stock	—	19,750	20,947
Proceeds from notes payable	—	—	18,488,929
Repayments of notes payable	—	—	(1,373,407)
Net cash provided by financing activities	—	19,750	62,257,370
Net (decrease) increase in cash and cash equivalents	(5,359,597)	(6,594,849)	10,777,982
Cash and cash equivalents, beginning of period	28,172,174	17,372,832	—
Cash and cash equivalents, end of period	$ 22,812,577	$ 10,777,982	$ 10,777,982
Supplemental disclosure of cash flow information			
Cash paid for interest	$ —	$ —	$ 38,006
Supplemental schedule of noncash investing and financing activities			
Conversion of notes payable and accrued interest to Series A-1 Convertible Preferred Stock	$ —	$ —	$ 16,099,770
Notes payable issued for purchase of assets from GlycoTech Corporation and related party	—	—	200,000
Series A Convertible Preferred Stock issued from purchase of assets from GlycoTech Corporation and related party	—	—	480,000

See accompanying notes.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Notes to Unaudited Financial Statements

1. Nature of Business

GlycoMimetics, Inc. (the Company), a Delaware corporation, is a clinical stage biotechnology company focused on the discovery and development of novel glycomimetic drugs to address unmet medical needs resulting from diseases in which carbohydrate biology plays a key role. Glycomimetics are molecules that mimic the structure of carbohydrates involved in important biological processes. Using its expertise in carbohydrate chemistry and knowledge of carbohydrate biology, the Company is developing a pipeline of proprietary glycomimetics that inhibit disease-related functions of carbohydrates, such as the roles they play in inflammation, cancer and infection. The Company was incorporated on April 4, 2003 and commenced operations on May 21, 2003. The Company is headquartered in Gaithersburg, Maryland.

The Company's executive personnel have devoted substantially all of their time to date to the planning and organization of the Company, the process of hiring scientists, initiating research and development programs, licensing proprietary technology and securing adequate capital for anticipated growth and operations. Accordingly, the Company is considered to be in the development stage as defined in Accounting Standards Codification (ASC) 915, *Development Stage Entities*.

The Company has incurred significant losses in the development of its product candidates, with the exception of the year ended December 31, 2012, in which it recognized net income of $3.7 million. These losses in prior periods were primarily attributable to the research and development of the Company's lead drug candidate, GMI-1070. The Company has not generated revenues from product sales. As a result, the Company has consistently reported negative cash flows from operating activities and net losses, had an accumulated deficit of $55,697,427 at June 30, 2013, and expects to continue incurring losses for the foreseeable future. The Company currently anticipates that its cash and cash equivalents will be sufficient to meet its anticipated cash requirements through the first quarter of 2014.

The Company's operations are subject to certain risks and uncertainties. The risks include rapid technology changes, the need to manage growth, the need to retain key personnel, the need to protect intellectual property, and the availability of additional capital financing on terms acceptable to the Company. The Company's current operating assumptions and projections, which reflect management's best estimate of future revenue and operating expenses, indicate that anticipated operating expenditures through the first quarter of 2014 can be met by available working capital; however, the Company's ability to meet its projections is subject to uncertainties, and there can be no assurance that the Company's current projections will be accurate. If the Company's cash requirements are more than projected, the Company may require additional financing. The type, timing and terms of financing selected by the Company, if required, will be dependent upon the Company's cash needs, the availability of financing sources and the prevailing conditions in the financial markets. There can be no assurance that such financing will be available to the Company at any given time or available on favorable terms.

Management believes that the Company has access to capital resources through private investments of equity from its existing stockholders. However, it has not secured any commitment for new financing as of the date of this prospectus, nor can it provide any assurance that new financing will be available on commercially acceptable terms, if at all. If the Company is unable to secure additional capital, it will be required to curtail its operations, and if these measures fail, it may not be able to continue its business. Curtailment of operations would cause significant delays in the Company's efforts to introduce its products to market, which is critical to the realization of its business plan and future operations of the Company.

2. Summary of Significant Accounting Policies

Basis of Presentation

The financial statements have been prepared in conformity with accounting principles generally accepted in the United States (GAAP) for interim financial information. Certain information and footnotes normally included in

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Notes to Unaudited Financial Statements (Continued)

2. Summary of Significant Accounting Policies (continued)

Basis of Presentation (continued)

financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to the rules and regulations of the Securities and Exchange Commission.

Unaudited Interim Financial Information

The accompanying balance sheet as of June 30, 2013, statements of operations and comprehensive income (loss) and statements of cash flows for the six months ended June 30, 2012 and 2013 and the period May 21, 2003 (date of inception) through June 30, 2013, and the statements of redeemable convertible preferred stock and stockholders' equity for the six months ended June 30, 2013 and the period May 21, 2003 (date of inception) through June 30, 2013 are unaudited. The interim unaudited financial statements have been prepared on the same basis as the annual audited financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement of the Company's financial position as of June 30, 2013 and the results of its operations and its cash flows for the six months ended June 30, 2012 and 2013 and the period May 21, 2003 (date of inception) through June 30, 2013. The financial data and other information disclosed in these notes related to the six months ended June 30, 2012 and 2013 are unaudited. The results for the six months ended June 30, 2013 are not necessarily indicative of results to be expected for the year ending December 31, 2013, any other interim periods, or any future year or period.

Unaudited Pro Forma Presentation

On August 14, 2013, the Company's board of directors authorized management of the Company to confidentially submit a registration statement to the Securities and Exchange Commission for the Company to sell shares of common stock to the public. The unaudited pro forma balance sheet information as of June 30, 2013 assumes the conversion of all outstanding shares of preferred stock as of that date into 30,726,326 shares of common stock.

The unaudited pro forma net loss per share is computed using the weighted-average number of shares of common stock outstanding after giving pro forma effect to the conversion of all issued and outstanding shares of preferred stock during the six months ended June 30, 2013 into shares of common stock as if such conversion had occurred at January 1, 2013.

Segment Information

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company views its operations and manages its business in one segment, which is the identification and development of glycomimetic compounds.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Although actual results could differ from those estimates, management does not believe that such differences would be material.

Significant Accounting Policies

The Company's significant accounting policies are disclosed in the audited financial statements for the years ended December 31, 2011 and 2012 included elsewhere in this prospectus. Since the date of those financial statements, there have been no changes to the Company's significant accounting policies.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Notes to Unaudited Financial Statements (Continued)

2. Summary of Significant Accounting Policies (continued)

Restricted Cash

The Company is required to maintain certificates of deposit that serve as collateral for operating leases and credit card accounts. Amounts classified as restricted cash are $83,000 at each of December 31, 2012 and June 30, 2013 and are presented under prepaid expenses and other current assets.

Fair Value Measurements

The Company's financial instruments include cash and cash equivalents. The fair values of the financial instruments approximate their carrying values at December 31, 2012 and June 30, 2013, due to their short-term maturities. The Company accounts for recurring and nonrecurring fair value measurements in accordance with ASC 820, *Fair Value Measurements*. ASC 820 defines fair value, establishes a fair value hierarchy for assets and liabilities measured at fair value, and requires expanded disclosures about fair value measurements. The ASC hierarchy ranks the quality of reliability of inputs, or assumptions, used in the determination of fair value, and requires assets and liabilities carried at fair value to be classified and disclosed in one of the following three categories:

- Level 1—Fair value is determined by using unadjusted quoted prices that are available in active markets for identical assets and liabilities.
- Level 2—Fair value is determined by using inputs other than Level 1 quoted prices that are directly and indirectly observable. Inputs can include quoted prices for similar assets and liabilities in active markets or quoted prices for identical assets and liabilities in inactive markets. Related inputs can also include those used in valuation or other pricing models that can be corroborated by observable market data.
- Level 3—Fair value is determined by inputs that are unobservable and not corroborated by market data. Use of these inputs involves significant and subjective judgments to be made by a reporting entity. In instances where the determination of the fair value measurement is based on inputs from different levels of fair value hierarchy, the fair value measurement will fall within the lowest level input that is significant to the fair value measurement in its entirety.

The Company periodically evaluates financial assets and liabilities subject to fair value measurements to determine the appropriate level at which to classify them each reporting period. This determination requires the Company to make subjective judgments as to the significance of inputs used in determining fair value and where such inputs lie within the ASC 820 hierarchy.

The Company has no assets or liabilities that were measured using quoted prices for similar assets and liabilities or significant unobservable inputs (Level 2 and Level 3 assets and liabilities, respectively) as of June 30, 2013 and December 31, 2012. The carrying value of cash held in money market funds of approximately $10.3 million as of June 30, 2013, is included in cash and cash equivalents and approximates market values based on quoted market prices (Level 1 inputs).

Comprehensive Income (Loss)

Effective January 1, 2012, the Company adopted Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) 2011-05, *Presentation of Comprehensive Income*, which requires the presentation of the comprehensive income (loss) and its components, as part of the financial statements. Comprehensive income (loss) comprises net income (loss) and other changes in equity that are excluded from net income (loss). For the six month periods ended June 30, 2012 and 2013, and for the period from May 21, 2003 (date of inception) to June 30, 2013, the Company's net income (loss) equals comprehensive income (loss) and, accordingly, no additional disclosure is presented.

Recently Issued Accounting Pronouncements Adopted

In February 2013, FASB issued ASU No. 2013-02, *Comprehensive Income (Topic 220): Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income* (ASU 2013-02). ASU 2013-02 requires companies

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Notes to Unaudited Financial Statements (Continued)

2. Summary of Significant Accounting Policies (continued)

Recently Issued Accounting Pronouncements Adopted (continued)

to present either in a single note or parenthetically on the face of the financial statements, the effect of significant amounts reclassified from each component of accumulated other comprehensive income based on its source and the income statement line items affected by the reclassification. This guidance is effective for annual reporting periods beginning after December 15, 2012. The Company's adoption of ASU 2013-02 did not have a significant impact on its financial position, results of operations or cash flows.

3. Net Income (Loss) Per Share

The following table sets forth the computation of basic and diluted earnings per share for the six months ended June 30, 2012 and 2013:

	2012	2013
Net income (loss)	$ 2,195,375	$ (3,027,604)
Income (loss) per share—basic	$ 0.72	$ (0.98)
Income (loss) per share—diluted	$ 0.06	$ (0.98)
Weighted-average number of shares—basic	3,069,603	3,095,925
Weighted-average number of shares—diluted	36,383,159	3,095,925

The following potentially dilutive securities outstanding at June 30, 2012 and 2013 have been excluded from the computation of diluted weighted average shares outstanding, as they would be anti-dilutive:

	2012	2013
Warrants	5,100	2,097,625
Stock options	138,925	4,876,698
Convertible preferred stock	—	30,726,326

4. Property and Equipment

Property and equipment consist of the following:

	DECEMBER 31, 2012	JUNE 30, 2013
Furniture, fixtures, and equipment	$ 106,291	$ 106,291
Laboratory equipment	900,837	901,815
Office equipment	22,421	25,664
Computer equipment	177,317	201,822
Leasehold improvements	40,077	41,843
	1,246,943	1,277,435
Less accumulated depreciation	(796,184)	(860,500)
	$ 450,759	$ 416,935

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)
Notes to Unaudited Financial Statements (Continued)

4. Property and Equipment (continued)

Depreciation of property and equipment totaled $43,288 and $64,317 for the six months ended June 30, 2012 and June 30, 2013, respectively, and $1,070,231 cumulatively for the period from May 21, 2003 (date of inception) to June 30, 2013.

5. Operating Leases

The Company leases its office and research space under a five-year operating lease that is subject to escalation clauses. In connection with its lease arrangement, the Company received a rent abatement as a lease incentive. The rent abatement has been recognized as deferred rent that will be adjusted on a straight-line basis over the term of the lease. Deferred rent was $247,164 at June 30, 2013. Total rent expense was $159,161 for the six months ended June 30, 2012 and $177,307 for the six months ended June 30, 2013, and $2,564,552 for the period from May 21, 2003 (date of inception) to June 30, 2013.

The following table presents the future minimum lease payments as of June 30, 2013 under the Company's lease for operating space:

YEAR	AMOUNT
2013	$ 243,656
2014	489,360
2015	418,069
Total	$ 1,151,085

6. Stockholders' Equity

Convertible Preferred Stock

Series A-1 Convertible Preferred Stock

On October 20, 2009, the Company entered into a Series A-1 Preferred Stock Purchase Agreement with certain investors. In connection with the financing, the Company issued 30,726,326 shares of Series A-1 Convertible Preferred Stock for an aggregate amount of $38,979,412, which included the conversion of principal and accrued interest related to an earlier bridge financing of $16,099,770. In connection with the Series A-1 Preferred Stock financing, all then-outstanding shares of Series A and Series B Preferred Stock were converted into common stock, and all then outstanding warrants to purchase Series B Preferred Stock were converted into warrants to purchase common stock. Immediately prior to the Series A-1 Preferred Stock financing, the Company effected a 1-for-10 reverse stock split of the outstanding common stock. All prior-period applicable share amounts have been retroactively adjusted to reflect the reverse stock split. As of June 30, 2013, the Company's Amended and Restated Certificate of Incorporation authorized the issuance of 130,601,021 shares of stock, of which 70,258,276 are designated as common stock with a par value of $0.001, and of which 60,342,745 are designated as Series A-1 Convertible Preferred Stock with a par value of $0.001.

Voting Rights and Dividends

The holder of each share of Series A-1 Convertible Preferred Stock has the right to one vote for each share of common stock into which the shares of Series A-1 Convertible Preferred Stock held by the holder are then convertible. The holder has full voting rights and powers equal to the voting rights and powers of a holder of common stock. As long as any shares of Series A-1 Convertible Preferred Stock remain outstanding, the holders of such shares are entitled to elect five directors of the Company. The holders of shares of Series A-1 Convertible Preferred Stock are entitled to receive dividends when, as, and if declared by the Board of Directors at a rate of $0.1015 per share per annum. Dividends are not cumulative.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Notes to Unaudited Financial Statements (Continued)

6. Stockholders' Equity (continued)

Convertible Preferred Stock (continued)

Liquidation

In the event of a liquidation of the Company, the holders of shares of Series A-1 Convertible Preferred Stock are entitled to receive, prior and in preference to any other series or class of capital stock, an amount equal to the greater of (i) an amount per share equal to the Original Issue Price of $1.2686 plus an amount equal to all declared but unpaid dividends thereon, or (ii) an amount per share equal to the amount per share such holder would have received upon a liquidation event had each holder of Series A-1 Convertible Preferred Stock converted such shares into common stock immediately prior to the liquidation event.

Conversion

The Series A-1 Convertible Preferred Stock is convertible into common shares at the election of the stockholder at any time. The number of shares of common stock a holder of Series A-1 Convertible Preferred Stock will receive is equal to the number of shares of Series A-1 Convertible Preferred Stock multiplied by the conversion rate. As of June 30, 2013, the conversion rate for the Series A-1 Convertible Preferred Stock was one-for-one. The conversion rate may be adjusted for certain anti-dilutive events. All outstanding shares of Series A-1 Convertible Preferred Stock shall automatically convert to shares of common stock upon an initial public offering of at least $36 million and per share price of $3.80, subject to adjustment as set forth in the Amended and Restated Certificate of Incorporation.

Common Stock

As of December 31, 2012 and June 30, 2013, there were 70,258,276 shares of common stock authorized to be issued. Certain of the outstanding shares of common stock are subject to stock restriction agreements (each, a Restriction Agreement). Pursuant to a Restriction Agreement, a stockholder shall not sell, assign, transfer, or otherwise dispose of any shares except to the Company or as expressly provided in the Restriction Agreement.

Warrants to Acquire Company Stock

On October 13, 2006, the Company issued a warrant to purchase 5,100 shares of common stock at an exercise price of $7.845 per share to a commercial bank. This warrant, which was originally issuable for Series B Preferred Stock prior to the conversion of Series B Preferred Stock to common stock in 2009, was vested upon issuance and expires in October 2016. The fair value of the warrant, which was de minimis, was calculated using the Black-Scholes option pricing model.

The following common stock warrants were outstanding as of June 30, 2013:

NUMBER OF SHARES UNDERLYING WARRANTS	EXERCISE PRICE PER SHARE	EXPIRATION DATE
985,339	$ 0.10	July 18, 2018
997,163	0.10	January 16, 2019
56,277	0.10	December 9, 2015
50,356	0.10	January 30, 2019
3,390	0.10	December 16, 2015
5,100	7.85	October 13, 2016

No warrants were exercised or expired during the six months ended June 30, 2012 or 2013.

Stock Incentive Plan

The 2003 Stock Incentive Plan (the Plan) provides for the grant of incentives and nonqualified stock options and restricted stock awards. The exercise price for incentive stock options must be at least equal to the fair value of the

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Notes to Unaudited Financial Statements (Continued)

6. Stockholders' Equity (continued)

Stock Incentive Plan (continued)

common stock on the grant date. Unless otherwise stated in a stock option agreement, 25% of the shares subject to an option grant will vest upon the first anniversary of the vesting start date and thereafter at the rate of one forty-eighth of the option shares per month as of the first day of each month after the first anniversary. Upon termination of employment by reasons other than death, cause, or disability, any vested options shall terminate 60 days after the termination date. Stock options terminate 10 years from the date of grant. The Plan terminated in accordance with its terms during the six months ended June 30, 2013.

A summary of the Company's stock option activity for the six months ended June 30, 2013 is as follows:

	OUTSTANDING OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE
Outstanding as of January 1, 2013	4,904,088	$ 0.36
Options granted	30,700	1.13
Options exercised	(58,090)	0.34
Outstanding as of June 30, 2013	4,876,698	0.37
Vested or expected to vest as of June 30, 2013	4,738,112	0.37
Exercisable as of June 30, 2013	4,037,274	0.36

The weighted-average remaining contractual term of stock options that are outstanding and exercisable as of June 30, 2013 was 6.4 years.

The weighted-average fair value of the options granted during the six months ended June 30, 2012 and 2013 was $0.46 and $0.76 per share, respectively, applying the Black-Scholes option pricing model utilizing the following weighted-average assumptions:

	2012	2013
Expected term	6.25 years	6.25 years
Expected volatility	94.77%	78.07%
Risk-free interest rate	0.60%	0.56%
Expected dividend yield	0%	0%

As of June 30, 2013, there was $302,197 of total unrecognized compensation expense related to unvested options that will be recognized over a weighted-average period of approximately one year. Total intrinsic value of the options exercised during the six months ended June 30, 2012 and 2013 was not material. The total fair value of shares vested in the six months ended June 30, 2012 and 2013 was $140,391 and $163,660, respectively.

GLYCOMIMETICS, INC.
(A Development-Stage Enterprise)

Notes to Unaudited Financial Statements (Continued)

6. Stockholders' Equity (continued)

Stock Incentive Plan (continued)

Stock-based compensation expense was recognized for the six months ended June 30:

	2012	2013
Research and development	$ 91,219	$ 99,999
General and administrative expense	111,919	117,675
Total	$203,138	$217,674

7. Research and License Agreements

In February 2004, the Company entered into a collaborative research agreement (the Research Agreement) with the University of Basel (the University) for biological evaluation of selectin antagonists. Certain patents covering the GMI-1070 compound are subject to provisions of the Research Agreement.

Under the terms of the Research Agreement the Company will owe a 10% payment to the University for all future milestone and royalty payments received from Pfizer with respect to GMI-1070.

In October 2011, the Company and Pfizer entered into a licensing agreement (the Agreement) that provides Pfizer an exclusive worldwide license to GMI-1070 for vaso-occlusive crisis associated with sickle cell disease and for other diseases for which the drug candidate may be developed. The Company was responsible for completion of the Phase 2 trial under Pfizer's oversight, after which Pfizer will assume all further development and commercialization responsibilities. Upon execution of the Agreement, the Company received an up-front payment of $22.5 million. The Agreement also provides potential development, regulatory and sales-based milestone payments of up to $320.0 million in the aggregate. The Company is also eligible to receive royalties on future sales contingent upon annual net sales thresholds. In addition, the Company and Pfizer have formed a joint steering committee that will oversee and coordinate activities as set forth in the research program. The $22.5 million up-front payment was recognized over a period of 1.5 years and was fully recognized as of June 30, 2013. During the six months ended June 30, 2012 and 2013, the Company recorded revenue of $7.5 million and $3.8 million, respectively, pursuant to the Pfizer license agreement in the Company's statement of operations. During the six months ended June 30, 2012 and 2013, no milestones related to this arrangement were earned or recognized.

Pfizer has the right to terminate the Agreement by giving prior written notice. As of June 30, 2013, Pfizer and the Company are both in compliance with the provisions of the Agreement.

Table of Contents

Shares

Common Stock

PRELIMINARY PROSPECTUS

Joint Book-Running Managers

Jefferies
Barclays

Co-Managers

Stifel
Canaccord Genuity

, 2013

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, payable by us in connection with the sale of the common stock being registered. All amounts shown are estimates except for the SEC registration fee and the Financial Industry Regulatory Authority, or FINRA, filing fee.

	AMOUNT TO BE PAID
SEC registration fee	$ *
FINRA filing fee	*
NASDAQ Global Market initial listing fee	*
Blue sky fees and expenses	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees and expenses	*
Miscellaneous fees and expenses	*
Total	$ *

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers.

We are incorporated under the laws of the State of Delaware. Section 102 of the Delaware General Corporation Law permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person 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, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

As permitted by the Delaware General Corporation Law, our amended and restated certificate of incorporation and bylaws to be in effect upon the completion of this offering will provide that: (i) we are required to indemnify our directors to the fullest extent permitted by the Delaware General Corporation Law; (ii) we may, in our discretion, indemnify our officers, employees and agents as set forth in the Delaware General Corporation Law; (iii) we are required, upon satisfaction of certain conditions, to advance all expenses incurred by our directors in connection with certain legal proceedings; (iv) the rights conferred in the bylaws are not exclusive; and (v) we are authorized to enter into indemnification agreements with our directors, officers, employees and agents.

We have entered into agreements with our directors that require us to indemnify them against expenses, judgments, fines, settlements and other amounts that any such person becomes legally obligated to pay (including with respect to a derivative action) in connection with any proceeding, whether actual or threatened, to which such person may be made a party by reason of the fact that such person is or was a director or officer of us or any of our affiliates, provided such person acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, our best interests. The indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder. We intend to enter into similar indemnification agreements with our executive officers prior to the completion of this offering. At present, no litigation or proceeding is pending that involves any of our directors or officers regarding which indemnification is sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

We maintain a directors' and officers' liability insurance policy. The policy insures directors and officers against unindemnified losses arising from certain wrongful acts in their capacities as directors and officers and reimburses us for those losses for which we have lawfully indemnified the directors and officers. The policy contains various exclusions.

In addition, the underwriting agreement filed as Exhibit 1.1 to this Registration Statement provides for indemnification by the underwriters of us and our officers and directors for certain liabilities arising under the Securities Act, or otherwise. Our investor rights agreement with certain investors also provides for cross-indemnification in connection with the registration of our common stock on behalf of such investors.

Item 15. Recent Sales of Unregistered Securities.

From August 21, 2010 through the date of the prospectus that is a part of this Registration Statement, we have granted options under our 2003 stock incentive plan to purchase an aggregate of 4,627,935 shares of our common stock to employees, consultants and directors, having exercise prices ranging from $0.34 to $1.13 per share. Of these, options to purchase an aggregate of 7,400 shares have been cancelled without being exercised. During the period from August 21, 2010 through the date of the prospectus that is a part of this Registration Statement, an aggregate of 1,062,110 shares were issued upon the exercise of stock options, at an exercise price of $0.34 per share, for aggregate proceeds of approximately $360,000.

The offers, sales and issuances of the stock options and the common stock issuable upon exercise of such options as described in this Item 15 were exempt from registration under Rule 701 promulgated under the Securities Act in that the transactions were under compensatory benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of such securities were our employees, directors or consultants and received the securities under our 2003 stock incentive plan. Appropriate legends were affixed to the securities issued in these transactions.

Item 16. Exhibits and Financial Statement Schedules.

The exhibits to the Registration Statement are listed in the Exhibit Index attached hereto and are incorporated by reference herein.

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 Securities and Exchange Commission 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:

(1) 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.

(2) 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, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Gaithersburg, State of Maryland, on the day of , 2013.

GLYCOMIMETICS, INC.

BY: _____
Rachel K. King
President and Chief Executive Officer

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Rachel K. King, Brian M. Hahn and Brent B. Siler, and each of them, his or her true and lawful agent, proxy and attorney-in-fact, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to (i) act on, sign and file with the Securities and Exchange Commission any and all amendments (including post-effective amendments) to this registration statement together with all schedules and exhibits thereto and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, together with all schedules and exhibits thereto, (ii) act on, sign and file such certificates, instruments, agreements and other documents as may be necessary or appropriate in connection therewith, (iii) act on and file any supplement to any prospectus included in this registration statement or any such amendment or any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and (iv) take any and all actions which may be necessary or appropriate to be done, as fully for all intents and purposes as he or she might or could do in person, hereby approving, ratifying and confirming all that such agent, proxy and attorney-in-fact or any of his substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
Rachel K. King	President, Chief Executive Officer and Director *(Principal Executive Officer)*	, 2013
Brian M. Hahn	Chief Financial Officer *(Principal Financial Officer and Principal Accounting Officer)*	, 2013
John J. Baldwin, Ph.D.	Director	, 2013
M. James Barrett, Ph.D.	Director	, 2013
William M. Gust	Director	, 2013
Michael A. Henos	Director	, 2013
John L. Magnani, Ph.D.	Director	, 2013
Franklin H. Top, Jr., M.D.	Director	, 2013

EXHIBIT INDEX

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
1.1†	Form of Underwriting Agreement.
3.1	Amended and Restated Certificate of Incorporation, as currently in effect.
3.2†	Form of Certificate of Amendment of Restated Certificate of Incorporation to be filed prior to the completion of this offering.
3.3†	Form of Amended and Restated Certificate of Incorporation to be effective upon the completion of this offering.
3.4	Amended and Restated Bylaws, as currently in effect.
3.5†	Form of Amended and Restated Bylaws to be effective upon completion of this offering.
4.1	Reference is made to exhibits 3.1 through 3.5.
4.2†	Specimen stock certificate evidencing shares of Common Stock.
5.1†	Opinion of Cooley LLP as to legality.
10.1*	License Agreement, dated as of October 7, 2011, as amended to date, by and between the Registrant and Pfizer Inc.
10.2	Second Amended and Restated Investor Rights Agreement, dated as of October 20, 2009, by and among the Registrant and certain of its stockholders.
10.3	Lease Agreement, dated as of July 1, 2010, as amended through December 6, 2011, by and between the Registrant and ARE-QRS Corp.
10.4	Warrant Issued to Silicon Valley Bank, dated October 12, 2006.
10.5	Form of Common Stock Warrant issued in December 2005 bridge financing.
10.6	Form of Common Stock Warrant issued in July 2008 bridge financing.
10.7	Form of Common Stock Warrant issued in January 2009 bridge financing.
10.8+	2003 Stock Incentive Plan, as amended to date.
10.9+	Form of Incentive Stock Option Agreement under 2003 Stock Incentive Plan.
10.10+	Form of Nonqualified Stock Option Agreement under 2003 Stock Incentive Plan.
10.11+†	Form of 2013 Equity Incentive Plan.
10.12+†	Form of Stock Option Grant Notice and Stock Option Agreement under 2013 Equity Incentive Plan.
10.13+†	Form of Restricted Stock Unit Grant Notice and Restricted Stock Unit Award Agreement under 2013 Equity Incentive Plan.
10.14+†	Form of Indemnification Agreement with non-employee directors.
10.15+†	Form of Indemnification Agreement with executive officers to be in effect upon the completion of this offering.
10.16+†	Form of Employment Agreement with executive officers to be in effect upon the completion of this offering.
23.1	Consent of Ernst & Young LLP, independent registered public accounting firm.
23.2†	Consent of Cooley LLP (included in Exhibit 5.1).
24.1	Power of Attorney. Reference is made to the signature page hereto.

† To be filed by amendment.
+ Indicates management contract or compensatory plan.
* Portions of this exhibit, indicated by asterisks, have been omitted pursuant to a request for confidential treatment and have been separately filed with the Securities and Exchange Commission.

Exhibit 3.1

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
GLYCOMIMETICS, INC.

GlycoMimetics, Inc., (the "**Corporation**") a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "**Delaware General Corporation Law**"),

DOES HEREBY CERTIFY,

FIRST: That the name of the Corporation is GlycoMimetics, Inc. and that the Corporation was originally incorporated pursuant to the Delaware General Corporation Law on April 4, 2003 under the name GlycoMimetics, Inc.

SECOND: That the Board of Directors of the Corporation and the Stockholders of the Corporation duly adopted resolutions proposing to amend and restate the Restated Certificate of Incorporation of the Corporation, as amended through the date hereof in the form set forth below, declaring said amendment and restatement to be advisable and in the best interests of the Corporation and its stockholders, and authorizing the appropriate officers of the Corporation to solicit the consent of the stockholders therefor.

THIRD: That the Stockholders of the Corporation have approved this Amended and Restated Certificate of Incorporation.

ARTICLE I

The name of the Corporation is GlycoMimetics, Inc.

ARTICLE II

The registered office of the Corporation shall be located at Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of New Castle, Delaware 19801. The registered agent of the Corporation at such address shall be The Corporation Trust Company.

ARTICLE III

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law. The Corporation shall have all power necessary or convenient to the conduct, promotion or attainment of such acts and activities.

ARTICLE IV

The total number of shares of all classes of stock that the Corporation shall have the authority to issue is 130,601,021, of which 70,258,276 of such shares are designated as common stock having a par value of $0.001 per share ("**Common Stock**"), and 60,342,745 of such shares are designated as preferred stock, having a par value of $0.001 per share ("**Preferred Stock**") all of which shall be designated as "**Series A-1 Convertible Preferred Stock**." The Common Stock and the Series A-1 Convertible Preferred Stock shall have the respective designations, rights, preferences, powers, qualifications, privileges, limitations and restrictions set forth below in Article V for such stock.

Upon the filing and effectiveness (the "**Effective Time**") pursuant to the Delaware General Corporation Law of this Amended and Restated Certificate of Incorporation of the Corporation, each ten (10) shares of the

Corporation's Common Stock ("**Old Common Stock**"), issued and outstanding immediately prior to the Effective Time shall automatically be reclassified as and combined into one (1) validly issued, fully paid and non-assessable share of Common Stock of the Corporation ("**New Common Stock**") without any further action by the Corporation or the holder thereof, subject to the treatment of fractional shares interests as described below (the "**Reverse Stock Split**"). No fractional shares of New Common Stock or certificates representing fractional shares of New Common Stock shall be issued in connection with the Reverse Stock Split. Unless waived, stockholders who otherwise would be entitled to receive fractional shares of New Common Stock shall be entitled to receive cash (without interest) from the Corporation in lieu of such fractional share interests, upon receipt by the Corporation of the stockholder's surrendered Old Certificates (as defined below), in the amount equal to such fraction multiplied by the fair market value of one share of Common Stock as determined in good faith by the Board of Directors of the Corporation. Each certificate that immediately prior to the Effective Time represented shares of Old Common Stock ("**Old Certificates**"), shall thereafter represent that number of shares of New Common Stock into which the shares of Old Common Stock represented by the Old Certificate shall have been combined, subject to the elimination of fractional share interests as described above.

ARTICLE V

The relative designations, rights, preferences, powers, qualifications, privileges, limitations and restrictions granted to or imposed upon Common Stock and Preferred Stock are as set forth below.

A. ***Common Stock*.**

1. Relative Rights. The Common Stock shall be subject to all of the rights, privileges, preferences and priorities of each class and series of the Preferred Stock as set forth herein or in the certificate of designations filed to establish the respective series of Preferred Stock. Each share of Common Stock shall have the same relative rights as and be identical in all respects to all the other shares of Common Stock.

2. Dividends. Subject to the rights of any series of Preferred Stock that may from time to time come into existence, the holders of Common Stock shall be entitled to receive dividends, out of any assets legally available for the payment of dividends thereon, but only if, when and as declared by the Board of Directors of the Corporation.

3. Dissolution, Liquidation, Winding Up. In the event of any Liquidation Event (as defined in Section 4D of Article V(B) of this Amended and Restated Certificate of Incorporation), the assets of the Corporation shall be distributed as provided in Section 4 of Article V(B) of this Amended and Restated Certificate of Incorporation.

4. Voting Rights. Each holder of shares of Common Stock shall be entitled to attend all special and annual meetings of the stockholders of the Corporation and to cast one vote for each outstanding share of Common Stock so held upon any matter or thing (including, without limitation, the election of one or more directors) properly considered and acted upon by the stockholders. Holders of Common Stock shall also have the right to elect directors of the Corporation as set forth in Section 2B of Article V.

5. Increase in Shares. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the Delaware General Corporation Law.

B. ***Preferred Stock*.**

1. Relative Rights. Each share of Series A-1 Convertible Preferred Stock shall have the same relative rights as and be identical in all respects to all the other shares of Series A-1 Convertible Preferred Stock.

2. Voting.

2A. General. The holder of each share of Preferred Stock shall have the right to one vote for each share of Common Stock into which the shares of Preferred Stock held by such holder are then convertible, and with respect to such vote, 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. Except as provided by law or by the other provisions of this Amended and Restated Certificate of Incorporation, holders of the Preferred Stock shall vote together with the holders of Common Stock as a single class.

2B. Board Seats. As long as any shares of Series A-1 Convertible Preferred Stock remain outstanding, the holders of such shares shall be entitled to elect five (5) directors of the Corporation at any election of directors. The holders of outstanding Common Stock shall be entitled to elect two (2) directors of the Corporation at any election of directors. The holders of Preferred Stock and Common Stock (voting together as a single class and on an as-converted basis) shall be entitled to elect any remaining directors of the Corporation.

Notwithstanding the provisions of Section 223(a)(1) and 223(a)(2) of the General Corporation Law, any vacancy, including newly created directorships resulting from any increase in the authorized number of directors or amendment of this Amended and Restated Certificate of Incorporation, and vacancies created by removal or resignation of a director, may be filled by a majority of the directors then in office, though less than a quorum, or by a sole remaining director, and the directors so chosen shall hold office until the next annual election and until their successors are duly elected and shall qualify, unless sooner displaced; provided, however, that where such vacancy occurs among the directors elected by the holders of a class or series of stock, the holders of shares of such class or series may override the Board of Directors' action to fill such vacancy by (i) voting for their own designee to fill such vacancy at a meeting of the corporation's stockholders or (ii) written consent, if the consenting stockholders hold a sufficient number of shares to elect their designee at a meeting of the stockholders. Any director may be removed during his or her term of office, either with or without cause, by, and only by, the affirmative vote of the holders of the shares of the class or series of 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, and any vacancy thereby created may be filled by the holders of that class or series of stock represented at the meeting or pursuant to written consent.

3. Dividends.

3A. Series A-1 Convertible Preferred Stock. The holders of shares of Series A-1 Convertible Preferred Stock shall be entitled to receive dividends, when, as and if declared by the Board of Directors, out of any assets legally available therefor, prior and in preference to any declaration of payment of any dividend (payable other than in Common Stock) on any other series or class of capital stock of the Corporation (including the Common Stock), at the rate of $0.1015 per share per annum (subject to appropriate adjustments to reflect any stock split, stock dividend, combination, subdivision, recapitalization or similar event). Such dividends shall not be cumulative. The holders of Series A-1 Convertible Preferred Stock shall be deemed to have waived any dividends that such holders shall be entitled to receive under this Section 3 upon the affirmative vote or written consent of the holders of a majority of the outstanding shares of Preferred Stock at the time of the declaration of such dividend (voting as a single class).

3B. Additional Dividends. After payment of the dividends specified in Section 3A, additional dividends or distributions shall be distributed among all holders of Common Stock and Preferred 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 at the then-effective conversion rate.

4. Liquidation Preference.

4A. Liquidation Preferences. In the event of any Liquidation Event (as defined below), the holders of the shares of Series A-1 Convertible Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of this Corporation to the holders of any other series or class of capital stock of the Corporation (including, without limitation, the Common Stock), by reason of their ownership thereof, an amount equal to the greater of (i) an amount per share equal to the Original Issue Price (as defined below) plus an amount equal to all declared but unpaid dividends thereon, or (ii) an amount per share equal to the amount per share such holder would have received upon a Liquidation Event had each holder of Series A-1 Convertible Preferred Stock converted such shares into Common Stock pursuant to Section 6 immediately prior to the Liquidation Event (the greater of (i) or (ii), the "**Series A-1 Liquidation Amount**" applicable to such share). If upon any Liquidation Event, the assets and funds thus to be distributed to the holders of the Series A-1 Convertible Preferred Stock shall be insufficient to permit payment to such holders of the full Series A-1 Liquidation Amount owed to such holders on all shares of Series A-1 Convertible Preferred Stock, then the entire assets and funds of the Corporation legally available for distribution shall be distributed ratably among the holders of shares of Series A-1 Convertible Preferred Stock in proportion to the full preferential amount that each such holder is otherwise entitled to receive under this Section 4A(1). For purposes of this Amended and Restated Certificate of Incorporation, "**Original Issue Price**" shall mean $1.2686 per share for each share of Series A-1 Convertible Preferred Stock (subject to appropriate adjustment to reflect any stock split, stock dividend, combination, subdivision, recapitalization or similar corporate event with respect to such series of Preferred Stock).

4B. Upon any Liquidation Event, immediately after the holders of Series A-1 Convertible Preferred Stock have been paid in full pursuant to Section 4A above, the remaining assets of the Corporation available for distribution to stockholders shall be distributed ratably among the holders of the shares of Common Stock in proportion to the number of shares of such stock owned by each such holder.

4C. The Corporation shall use its reasonable best efforts to provide each holder of record of Series A-1 Convertible Preferred Stock written notice of any Liquidation Event, stating the Series A-1 Liquidation Amount(s) applicable to the shares of Series A-1 Convertible Preferred Stock held by such holder and the manner in which the payments of such Series A-1 Liquidation Amount shall be made, not less than 20 days prior to the stockholders' meeting called to approve such Liquidation Event, or 20 days prior to the closing of such Liquidation Event, such notice to be addressed to each such holder at its address as shown by the records of the Corporation.

4D. For purposes of this Section 4, the following events shall be deemed a "**Liquidation Event,**" whether occurring in one transaction or a series of related transactions, unless the holders of a majority of the then-outstanding Preferred Stock (voting together as a single class and on an as-converted basis) elect otherwise by written notice: (w) the voluntary or involuntary liquidation, dissolution or winding up of the Corporation, (x) the consolidation or merger of the Corporation into or with any other entity or entities (other than a merger or consolidation in which the holders of capital stock of the Corporation immediately prior to such merger or consolidation continue to hold at least 50% of the voting power of the capital stock of the Corporation or the surviving or acquiring entity or its parent in any case in substantially the same relative proportions as held immediately prior to such merger or consolidation), (y) the sale or transfer (or other disposition) by the Corporation of all or substantially all its assets, or (z) the sale, exchange or transfer by the Corporation's stockholders, in a single transaction or series of related transactions, of capital stock to a person or group of affiliated persons (other than an underwriter of the Corporation's securities or pursuant to one or more customary venture capital financings by the Corporation approved by holders of a majority of the then-outstanding Preferred Stock (voting together as a single class and on an as-converted basis)) if, after such closing, such person or group of affiliated persons would hold a majority of the combined voting power of all classes of stock of the Corporation (or its successor); *provided*, *however*, that the occurrence of any event listed in (w), (x), (y) or (z) shall not be deemed a Liquidation Event if its sole purpose is to change the state of the Corporation's incorporation or to create a holding company that will be owned in substantially the same proportions by the persons who held the Corporation's securities immediately prior to such event.

4E. Whenever the distribution provided for in this Section 4 shall be payable in property other than cash, the value of such distribution shall be the fair market value of such property as determined in good faith by the Board of Directors of the Corporation; provided that to the extent such distribution is comprised of securities which are not subject to restrictions on free marketability and which are of a class for which there is a public market, such securities shall be valued as follows: (1) if traded on a securities exchange or through the Nasdaq Global Market, the value shall be deemed to be the average of the closing prices of the securities on such exchange or system over the twenty (20) trading-day period ending three (3) trading days prior to the closing of the Liquidation Event; and (2) if traded over the counter, the value shall be deemed to be the average of the closing bid or sale prices (whichever is applicable) over the twenty (20) trading-day period ending three (3) days prior to the closing of such Liquidation Event.

4F(1). The Corporation shall not have the power to effect a Liquidation Event referred to in Section 4A unless the agreement or plan of merger or consolidation for such transaction (the "**Merger Agreement**") provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 4A and 4B.

4F(2). In the event of a Liquidation Event, if the Corporation does not effect a dissolution of the Corporation under the Delaware General Corporation Law within 90 days after such Liquidation Event, then (i) the Corporation shall send a written notice (the "**Corporation Notice**") to each holder of Preferred Stock no later than the 90th day after the Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Preferred Stock, and (iii) if the holders of a majority of the then-outstanding shares of Preferred Stock (voting together as a single class and on an as-converted basis) so request in a written instrument delivered to the Corporation ("**Redemption Election**") not later than 120 days after such Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors of the Corporation), together with any other assets of the Corporation available for distribution to its stockholders (the "**Available Proceeds**"), to the extent legally available therefor, on the 150th day after such Liquidation Event, to redeem all outstanding shares of Preferred Stock at a price per share equal to the applicable Liquidation Amount in effect for each such series of Preferred Stock. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Preferred Stock, the Corporation shall redeem a pro rata portion of each holder's shares of Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts, and in the respective priorities, which would otherwise be payable in respect of the shares to be redeemed if the Available Proceeds 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. Prior to the distribution or redemption provided for in this Section 4F(2), the Corporation shall not expend or dissipate the consideration received for such Liquidation Event, except to discharge expenses incurred in connection with such Liquidation Event.

4F(3). The Corporation Notice shall be given by the Corporation by mail, postage prepaid, or by facsimile transmission to non-U.S. residents, to each holder of record (at the close of business on the business day next preceding the day on which the Corporation Notice is given) of shares of Preferred Stock. Within twenty (20) days after receipt of a Redemption Election under Section 4F(2), the Corporation shall notify the holders of Preferred Stock of the redemption specifying the Available Proceeds and the date on which the applicable Liquidation Amounts shall be payable, which shall be no more than thirty (30) days after the Company's receipt of the Redemption Election. From and after the close of business on the date on which the applicable Liquidation Amounts are distributed to the holders of the Preferred Stock in full, all rights of holders of shares of Preferred Stock shall cease, and such shares shall not thereafter be transferred on the books of the Corporation or be deemed to be outstanding for any purpose whatsoever. Upon receipt of the applicable Liquidation Amount in full, such Preferred Stock shall be cancelled and shall not under any circumstance be reissued; and the Corporation may from time to time take such appropriate corporate actions as may be necessary to reduce accordingly the number of authorized shares of Preferred Stock as applicable.

4G. In the event of a Liquidation Event, if any portion of the consideration payable to the stockholders of the Corporation is placed into escrow and/or is payable to the stockholders of the Corporation subject to contingencies, the Merger Agreement shall provide that (a) the portion of such consideration that is not placed in 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 4A and 4B as if the Initial Consideration were the only consideration payable in connection with such Liquidation Event and (b) any additional consideration which becomes payable to the stockholders of the Corporation upon release from escrow or satisfaction of contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 4A and 4B after taking into account the previous payment of the Initial Consideration as part of the same transaction.

5. Restrictions.

5A. Preferred Stock. So long as an aggregate of at least 5,000,000 shares of Preferred Stock remain outstanding (as adjusted for stock splits, stock dividends, combinations, subdivisions, reorganizations and similar events), except where the vote or written consent of the holders of a greater number of shares of the Corporation is required by law or by this Certificate of Incorporation, and in addition to any other vote required by law or this Certificate of Incorporation, this Corporation shall not, by amendment, merger, consolidation or otherwise, without first obtaining the approval (by vote or written consent) of the holders of a majority of the then-outstanding shares of Preferred Stock (voting together as a single class, and on an as-converted basis):

(1) Consent to or consummate any Liquidation Event;

(2) Consent to or consummate (i) any liquidation, dissolution or winding up of any Subsidiary, (ii) any sale, transfer or other disposition by any Subsidiary of all or substantially all its assets, (iii) any merger or consolidation of any Subsidiary with or into another entity (other than the Corporation or a direct or indirect wholly owned subsidiary of the Corporation), or (iv) any transfer of any securities of any Subsidiary (other than to a direct or indirect wholly owned subsidiary of the Corporation) in each case unless the Board of Directors resolves at a duly-called meeting or duly consents in writing that such transaction is not material to the Corporation and its Subsidiaries taken as a whole;

(3) Amend, alter or repeal any provision of this Amended and Restated Certificate of Incorporation or By-laws or take any other action to adversely affect, alter or change the powers, preferences, or special rights of the shares of Preferred Stock, to increase or decrease the aggregate number of authorized shares of Preferred Stock (or any series thereof) or to increase or decrease the par value of the shares of Preferred Stock;

(4) Authorize or issue, or obligate itself to issue, any other equity security including any other security convertible into or exercisable for any equity security having a preference over, or being on a parity with, any series of the Preferred Stock with respect to liquidation preference, voting, dividends, redemption or otherwise;

(5) Except as otherwise provided in Section 4F, purchase or redeem, or set aside any sums for the purchase or redemption of, or pay any dividend or make any distribution on, any shares of stock of the Corporation, except for: (i) the payment, in accordance with the provisions of this Amended and Restated Certificate of Incorporation, of dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock; and (ii) shares of Common Stock repurchased from employees or consultants at the original issue price thereof or, if approved by the Corporation's Board of Directors, at such higher price as specifically provided for in an agreement pursuant to which such shares were originally issued (in each case not to exceed $10,000 in any 12-month period);

(6) Incur indebtedness for borrowed money with a maturity greater than six months and in excess of $250,000 (whether individually or in the aggregate), other than trade credit incurred in the ordinary course of business, which has not been approved by the Corporation's Board of Directors;

(7) Increase the number of Reserved Employee Shares (as defined in Section 8 hereof);

(8) Consent to or consummate any transaction between the Corporation or any Subsidiary, and any Related Party, which is not in the ordinary course of business and which has not been approved by the Corporation's Board of Directors (including approval of the disinterested members of the Corporation's Board of Directors); or

(9) Enter into any type of transaction that in the judgment of the Board of Directors results in a change of ownership of substantially all of the intellectual property of the Corporation (other than non-exclusive licenses).

5B. Series A-1 Convertible Preferred Stock. So long as at least twenty-five percent (25%) of the shares of Series A-1 Convertible Preferred Stock issued pursuant to that Series A-1 Convertible Preferred Stock Purchase Agreement dated on or about the Filing Date (as defined below), as amended from time to time (the "**Series A-1 Purchase Agreement**") remain outstanding (as adjusted for stock splits, stock dividends, combinations, subdivisions, reorganizations and similar events), in addition to any other vote or consent required herein or by law, the vote or written consent of the holders of at least a majority of the then outstanding shares of the Series A-1 Convertible Preferred Stock shall be necessary for effecting any amendment, alteration or repeal of any provisions of the Certificate of Incorporation or Bylaws of the Corporation that alters or changes the voting or other powers, preferences or other special rights, privileges or restrictions of the Series A-1 Convertible Preferred Stock (whether by merger, consolidation or otherwise) so as to effect the Series A-1 Convertible Preferred Stock adversely and in a manner different than any future series of Preferred Stock (it being understood that the Series A-1 Convertible Preferred Stock shall not be affected differently because of the proportional differences in the amounts of respective issue prices, liquidation preferences and redemption prices that arise out of differences in the original issue price vis-a-vis other series of Preferred Stock).

6. Conversion. The holders of shares of Preferred Stock shall have the following conversion rights:

6A. Right to Convert. Subject to the terms and conditions of this Section 6, the holder of any share or shares of Preferred Stock shall have the right, at the option of the holder thereof, at any time after the date of issuance of such share, to convert any such shares of Preferred Stock (except that upon any liquidation of the Corporation the right of conversion shall terminate at the close of business on the business day fixed for payment of the amounts distributable on the Preferred Stock and upon any redemption of the Preferred Stock pursuant to Section 4F, the right of conversion 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 redemption price is not fully paid on such redemption date, in which case the right of conversion for such shares shall continue until such price is paid in full) into such number of fully paid and nonassessable shares of Common Stock as is obtained by (i) multiplying the number of shares of such series of Preferred Stock so to be converted by the Original Issue Price for such series and (ii) dividing the result by the applicable Conversion Price for such series (as defined below). Such rights of conversion shall be exercised by the holder thereof by giving written notice that the holder elects to convert a stated number of shares of Preferred Stock, as applicable, into Common Stock and by surrender of a certificate or certificates for the shares so to be converted to the Corporation at its principal office (or such other office or agency of the Corporation as the Corporation may designate by notice in writing to such holder) at any time during its usual business hours on the date set forth in such notice, together with a statement of the name or names (with address) in which the certificate or certificates for shares of Common Stock shall be issued. Notwithstanding any other provisions hereof, if a conversion of Preferred Stock is to be made in connection with any transaction affecting the Corporation, the conversion of any shares of

Preferred Stock, may, at the election of the holder thereof, be conditioned upon the consummation of such transaction, in which case such conversion shall not be deemed to be effective until such transaction has been consummated, subject in all events to the terms hereof applicable to such transaction. For purposes of this Section 6B, the applicable "**Conversion Price**" for the Series A-1 Convertible Preferred Stock shall initially be $1.2686 per share, provided, however, that upon the occurrence of a Subsequent Closing (as defined in the Series A-1 Purchase Agreement) in connection with which the Board of Directors increases the number of Reserved Employee Shares, the applicable Conversion Price for the Series A-1 Convertible Preferred Stock shall be an amount per share, rounded to four decimals, calculated as follows (subject to appropriate adjustment to reflect any stock split, stock dividend, combinations, subdivision, recapitalization or similar event): Conversion Price = (A) Pre-Money Valuation (as defined in the Series A-1 Purchase Agreement) divided by (B) the sum of (i) Pre-Money Capitalization (as defined in the Series A-1 Purchase Agreement) plus (ii) Additional Reserved Employee Shares (as defined in the Series A-1 Purchase Agreement). The applicable Conversion Price shall be subject to adjustment as provided in Section 6D below.

6B. Issuance of Certificates; Time Conversion Effected. Promptly after the receipt of the written notice referred to in Section 6A and the surrender of the certificate or certificates for the share or shares of Preferred Stock to be converted, the Corporation shall, as soon as practicable thereafter, issue and deliver, or cause to be issued and delivered, to the holder of such certificate or certificates, registered in such name or names as such holder may direct, a certificate or certificates for the number of whole shares of Common Stock issuable upon the conversion of such share or shares of Preferred Stock. To the extent permitted by law, such conversion shall be deemed to have been effected and the applicable Conversion Price shall be determined as of immediately prior to the close of business on the date on which such certificate or certificates shall have been surrendered, and at such time the rights of the holder appurtenant to such share or shares of Preferred Stock shall cease, and the person or persons in whose name or names any certificate or certificates for shares of Common Stock shall be issuable upon such conversion shall be deemed to have become the holder or holders of record of the shares of Common Stock represented thereby as of such date. Notwithstanding anything to the contrary in this Section 6B, if the conversion is in connection with an underwritten offering of securities registered pursuant to the Securities Act, the conversion may, at the option of any holder tendering shares of Preferred Stock for conversion, be conditioned upon the closing with the underwriters of the sale of securities pursuant to such offering, in which event the person(s) entitled to receive the Common Stock upon such conversion shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of such sale of securities. All shares of Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the time of conversion, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Section 6C. Any shares of Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares for any such series of Preferred Stock, 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.

6C. Fractional Shares; Partial Conversion. No fractional shares shall be issued upon conversion of Preferred Stock into Common Stock. No payment or adjustment shall be made upon any such conversion with respect to any cash dividends previously payable on the Common Stock issued upon such conversion. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Preferred Stock by a holder thereof shall at the option of such holder be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, if any, any fractional shares of Common Stock would, except for the provisions of the first sentence of this Section 6C, be delivered upon such conversion, the Corporation, in lieu of delivering such fractional share, shall pay to the holder surrendering the Preferred Stock for conversion an amount in cash equal to such fraction multiplied by the fair market value of one share of Common Stock as determined in good faith by the Board of Directors of the Corporation. In case the number of shares of Preferred Stock represented by the certificate or certificates surrendered pursuant to Section 6A exceeds the number of shares of Preferred Stock so converted, the Corporation shall, upon such conversion, execute and deliver to the holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of Preferred Stock represented by the certificate or certificates surrendered which are not to be converted.

6D. Adjustment of Conversion Price Upon Issuance of Common Stock. Except as otherwise expressly provided elsewhere herein, if, at any time after the date the filing of this Amended and Restated Certificate of Incorporation is accepted by the Secretary of State of the State of Delaware (the "**Filing Date**"), the Corporation shall issue or sell in any manner, or is, in accordance with Sections 6D(1) through 6D(7), deemed to have issued or sold, any shares of Common Stock without consideration or for a consideration per share less than the applicable Conversion Price for a series of Preferred Stock in effect (such sale or issuance, a "**Dilutive Issuance**") immediately prior to the time of such issue or sale, then, forthwith upon such issue or sale, the applicable Conversion Price for such series of Preferred Stock (if it is a Dilutive Issuance) in effect immediately prior to such issuance or sale shall be adjusted to a price determined by multiplying such applicable Conversion Price immediately prior to such issue or sale by a fraction, the numerator of which shall be the number of shares of Common Stock Outstanding (as defined below) immediately prior to such issuance plus the number of shares of Common Stock that the aggregate consideration received by the Corporation for such issuance would purchase at such Conversion Price; and the denominator of which shall be the number of shares of Common Stock Outstanding (as defined below) immediately prior to such issuance plus the number of shares of Common Stock issued, or deemed issued pursuant to Sections 6D(1), 6(D)(2) or 6(D)(4), in the applicable Dilutive Issuance. For purposes of this Section 6D, the term "**Common Stock Outstanding**" shall mean and include the following: (1) outstanding Common Stock, (2) Common Stock issuable upon conversion of outstanding Preferred Stock and (3) Common Stock issuable upon exercise of outstanding Options (as defined below) or other Convertible Securities (as defined below) and shares described in (1) through (3) above shall be included whether vested or unvested, whether contingent or non-contingent and whether exercisable or not yet exercisable. Except to the limited extent provided for in Sections 6D(2) and 6D(3), no adjustment of any applicable Conversion Price pursuant to this Section 6D (including any adjustments made to the provisions of Sections 6D(1) to 6D(7), shall have the effect of increasing the Conversion Price above the Conversion Price in effect immediately prior to such adjustment. Additionally, for any adjustment made pursuant to this Section 6D (including any adjustments made pursuant to the provisions of Sections 6D(1) to 6D(7)), no adjustment of any applicable Conversion Price shall be made in an amount less than one one-hundredth of one cent ($0.0001) per share, provided that any adjustments that are not required to be made by reason of this sentence shall be carried forward and shall be taken into account in any subsequent adjustment made prior to three (3) years from the date of the event giving rise to the adjustment being carried forward.

For purposes of this Section 6D, the following Sections 6D(1) to 6D(7) shall also be applicable:

6D(1) Issuance of Rights or Options. In case at any time the Corporation shall in any manner after the Filing Date grant (whether directly or by assumption in a merger or otherwise) any warrants or other rights to subscribe for or to purchase, or any options for the purchase of, Common Stock or any stock or security convertible into or exchangeable for Common Stock (such warrants, rights or options being called "**Options**" and such convertible or exchangeable stock or securities being called "**Convertible Securities**") whether or not such Options or the right to convert or exchange any such Convertible Securities are immediately exercisable, and the price per share for which Common Stock is issuable upon the exercise of such Options or upon the conversion or exchange of such Convertible Securities (determined by dividing (i) the total amount, if any, received or receivable by the Corporation as consideration for the granting of such Options, plus the minimum aggregate amount of additional consideration payable to the Corporation upon the exercise of all such Options, plus, in the case of such Options which relate to Convertible Securities, the minimum aggregate amount of additional consideration, if any, payable upon the issue or sale of such Convertible Securities and upon the conversion or exchange thereof, by (ii) the total maximum number of shares of Common Stock issuable upon the exercise of such Options or upon the conversion or exchange of all such Convertible Securities issuable upon the exercise of such Options) shall be less than the applicable Conversion Price for each series of Preferred Stock in effect immediately prior to the time of the granting of such Options, then the total maximum number of shares of Common Stock issuable upon the exercise of such Options or upon conversion or exchange of

the total maximum amount of such Convertible Securities issuable upon the exercise of such Options shall be deemed to have been issued for such price per share (determined as set forth immediately above) as of the date of granting of such Options or the issuance of such Convertible Securities and thereafter shall be deemed to be outstanding. Except as otherwise provided in Section 6D(3), no adjustment of an applicable Conversion Price shall be made upon the actual issue of such Common Stock or of such Convertible Securities upon exercise of such Options or upon the actual issue of such Common Stock upon conversion or exchange of such Convertible Securities.

6D(2) Issuance of Convertible Securities. In case the Corporation shall in any manner after the Filing Date issue (whether directly or by assumption in a merger or otherwise) or sell any Convertible Securities, whether or not the rights to exchange or convert any such Convertible Securities are immediately exercisable, and the price per share for which Common Stock is issuable upon such conversion or exchange (determined by dividing (i) the total amount received or receivable by the Corporation as consideration for the issue or sale of such Convertible Securities, plus the minimum aggregate amount of additional consideration, if any, payable to the Corporation upon the conversion or exchange thereof, by (ii) the total maximum number of shares of Common Stock issuable upon the conversion or exchange of all such Convertible Securities) shall be less than the applicable Conversion Price in effect immediately prior to the time of such issue or sale, then the total maximum number of shares of Common Stock issuable upon conversion or exchange of all such Convertible Securities shall be deemed to have been issued for such price per share (determined as set forth immediately above) as of the date of the issue or sale of such Convertible Securities and thereafter shall be deemed to be outstanding, provided that (a) except as otherwise provided in Section 6D(3), no adjustment of an applicable Conversion Price shall be made upon the actual issue of such Common Stock upon conversion or exchange of such Convertible Securities and (b) if any such issue or sale of such Convertible Securities is made upon exercise of any Options to purchase any such Convertible Securities for which adjustments of an applicable Conversion Price have been or are to be made pursuant to Section 6D(1), no further adjustment of such applicable Conversion Price shall be made by reason of such issue or sale.

6D(3) Change in Option Price or Conversion Rate. If the exercise price provided for in any Option, the additional consideration, if any, payable upon the conversion or exchange of any Convertible Security or the rate at which any Convertible Security is convertible into or exchangeable for Common Stock changes at any time, the applicable Conversion Price which would have been in effect at the time of such event shall forthwith be adjusted (in each case by an amount equal to not less than one one-hundredth of one cent ($0.0001)) to the applicable Conversion Price which would have been in effect at such time had such Options or Convertible Securities still outstanding provided for such changed exercise price, additional consideration or conversion rate, as the case may be, at the time initially granted, issued or sold; and on the expiration of any such Option or the termination of any such right to convert or exchange such Convertible Securities, the applicable Conversion Price then in effect hereunder shall forthwith be increased to the applicable Conversion Price which would have been in effect at the time of such expiration or termination had such Option or Convertible Securities, to the extent outstanding immediately prior to such expiration or termination, never been issued.

6D(4) Stock Dividends. In the event that the Corporation shall at any time or from time to time after the Filing Date declare a dividend or make any other distribution upon any stock of the Corporation payable in Common Stock (except for the issue of stock dividends or distributions upon the outstanding Common Stock for which adjustment is made pursuant to Section 6F), Options or Convertible Securities, any Common Stock, Options or Convertible Securities, as the case may be, issuable in payment of such dividend or distribution shall be deemed to have been issued or sold without consideration.

6D(5) Consideration for Stock. In the event that the Corporation shall, at any time after the Filing Date, issue or sell any shares of Common Stock, Options or Convertible Securities for cash, the consideration received therefor shall be deemed to be the amount received by the Corporation therefor, without deduction therefrom of any expenses incurred or any underwriting commissions or concessions

paid or allowed by the Corporation in connection therewith. In case any shares of Common Stock, Options or Convertible Securities shall be issued or sold for a consideration other than cash, the amount of the consideration other than cash received by the Corporation shall be the fair value of such consideration as determined in good faith by the Board of Directors of the Corporation, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith. In case any Options shall be issued in connection with the issue and sale of other securities of the Corporation, together comprising one integral transaction in which no specific consideration is allocated to such Options by the parties thereto, such Options shall be deemed to have been issued for such consideration as determined in good faith by the Board of Directors of the Corporation.

6D(6) Record Date. In case the Corporation shall take a record of the holders of its Common Stock for the purpose of entitling them (i) to receive a dividend or other distribution payable in Common Stock, Options or Convertible Securities or (ii) to subscribe for or purchase Common Stock, Options or Convertible Securities, then such record date shall be deemed to be the date of the issue or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

6D(7) Treasury Shares. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Corporation, and the disposition of any such shares shall be considered an issue or sale of Common Stock for the purpose of this Section 6D.

6D(8) No Adjustment of Conversion Price. No adjustment in the Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least a majority of the then-outstanding shares of Preferred Stock agreeing that no such adjustment shall be made as the result of the Dilutive Issuance.

6E. Certain Issues of Common Stock Excepted. Anything herein to the contrary notwithstanding, the Corporation shall not be required to make any adjustment of any Conversion Price with respect to the granting or the issuance of (i) the Series A-1 Convertible Preferred Stock issued pursuant to the Purchase Agreement, or the Common Stock issuable upon conversion of such Series A-1 Convertible Preferred Stock, (ii) restricted stock, stock options or warrants that qualify as Reserved Employee Shares (as defined in Section 8 hereof), (iii) any shares of Common Stock pursuant to options, rights or warrants previously granted, outstanding or issued prior to the Filing Date (including, without limitation, those certain warrants for the purchase of approximately 2,032,858 shares of the Corporation's Common Stock (as equitably adjusted for stock splits, stock dividends, stock combinations, recapitalizations and the like) issued by the Corporation in July 2008, January 2009 and June 2009 in connection with the issuance of Convertible Promissory Notes in the aggregate principal amount of approximately $15,315,525), (iv) securities issued pursuant to the acquisition of another bona fide commercial operating entity by the Corporation or any of its Subsidiaries by merger or purchase by the Corporation or any of its Subsidiaries of all or substantially all the stock or assets of another bona fide commercial operating entity, provided such acquisition was approved by the Board of Directors of the Corporation, (vi) securities or rights to acquire securities issued pursuant to a firm-commitment underwritten public offering registered under the Securities Act, (vii) securities (or the issuance of Common Stock upon the exercise of any such securities) issued in connection with any equipment, bank loan, lease or other debt financing (other than primarily for equity financing purposes) approved by the Board of Directors of the Corporation, and (viii) any securities issued in connection with a strategic partnership, joint venture or other similar agreement (other than primarily for equity financing purposes), provided that such is approved by the Board of Directors.

6F. Subdivision or Combination of Common Stock. In case the Corporation shall at any time subdivide (by any stock split, stock dividend or otherwise) its outstanding shares of Common Stock into a greater number of shares, each applicable Conversion Price in effect immediately prior to such subdivision shall be proportionately reduced, and, conversely, in case the outstanding shares of Common Stock shall be combined into a smaller number of shares, each applicable Conversion Price in effect immediately prior to such combination shall be proportionately increased.

6G. Reorganization or Reclassification. If any capital reorganization, reclassification, recapitalization, consolidation, merger, sale of all or substantially all of the Corporation's assets or other similar transaction that does not constitute a Liquidation Event pursuant to Section 4D above (any such transaction being referred to herein as an "**Organic Change**") shall be effected in such a way that holders of Common Stock shall be entitled to receive (either directly or upon subsequent liquidation) stock, securities or assets with respect to or in exchange for Common Stock, then, as a condition of such Organic Change, lawful and appropriate provisions shall be made by the Corporation (in form and substance reasonably acceptable to the holders of a majority of the then outstanding shares of Preferred Stock, voting together as a single class and on an as-converted basis) whereby each holder of share(s) of Preferred Stock shall thereupon have the right to receive, upon the basis and upon the terms and conditions specified herein and in lieu of the share(s) of Common Stock immediately theretofore receivable upon the conversion of such share(s) of Preferred Stock, such shares of stock, securities or assets as would have been issued or payable, in connection with such Organic Change, to a holder of the number of shares of Common Stock equal to the number of shares of Common Stock that would have been received by the holder of Preferred Stock had he, she or it converted his, hers or its share(s) of Preferred Stock into shares of Common Stock immediately prior to such Organic Change.

6H. Notice of Adjustment. Upon any adjustment of an applicable Conversion Price, then and in each such case the Corporation shall give written notice thereof, by first class mail, postage prepaid, or by facsimile transmission to non-U.S. residents, addressed to each holder of shares of Preferred Stock, as applicable, at the address of such holder as shown on the books of the Corporation, which notice shall state the applicable Conversion Price resulting from such adjustment, setting forth in reasonable detail the method upon which such calculation is based.

6I. Other Notices. In case at any time:

(1) the Corporation shall declare any dividend upon its Common Stock payable in cash or stock or make any other distribution to the holders of its Common Stock;

(2) the Corporation shall offer for subscription pro rata to the holders of its Common Stock any additional shares of stock of any class or other rights;

(3) there shall be any capital reorganization or reclassification of the capital stock of the Corporation, or a consolidation or merger of the Corporation with or into, or a sale of all or substantially all its assets to, another entity or entities; or

(4) there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Corporation;

then, in any one or more of said cases, the Corporation shall use its reasonable best efforts to give, by first class mail, postage prepaid, or by facsimile transmission to non-U.S. residents, addressed to each holder of any shares of Preferred Stock at the address of such holder as shown on the books of the Corporation, (a) at least 20 days' prior written notice of the date on which the books of the Corporation shall close or a record shall be taken for such dividend, distribution or subscription rights or for determining rights to vote in respect of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up and (b) in the case of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, at least 20 days' prior written notice of the date when the same shall take place. Such notice in accordance

with the foregoing clause (a) shall also specify, in the case of any such dividend, distribution or subscription rights, the date on which the holders of Common Stock shall be entitled thereto and such notice in accordance with the foregoing clause (b) shall also specify the date on which the holders of Common Stock shall be entitled to exchange their Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, as the case may be.

6J. Stock to be Reserved. The Corporation will at all times reserve and keep available out of its authorized but unissued Common Stock, solely for the purpose of issuance upon the conversion of Preferred Stock as herein provided, such number of shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Preferred Stock. The Corporation covenants that all shares of Common Stock which shall be so issued shall be duly and validly issued and fully paid and nonassessable and free from all taxes, liens and charges with respect to the issue thereof, and, without limiting the generality of the foregoing, the Corporation covenants that it will from time to time take all such action as may be requisite to assure that the par value per share of the Common Stock is at all times equal to or less than each applicable Conversion Price in effect at the time. The Corporation will take all such action as may be necessary to assure that all such shares of Common Stock may be so issued without violation of any applicable law or regulation, or of any requirement of any national securities exchange upon which the Common Stock may be listed.

6K. No Reissuance. Shares of Preferred Stock which are converted into shares of Common Stock as provided herein shall not be reissued.

6L. Issue Tax. To the extent permitted by applicable law, the issuance of certificates for shares of Common Stock upon conversion of Preferred Stock shall be made without charge to the holders thereof for any issuance tax in respect thereof, provided that the Corporation shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the holder of the Preferred Stock which is being converted.

6M. Definition of Common Stock. As used in this Section 6, the term "**Common Stock**" shall mean and include the Corporation's authorized Common Stock, par value $0.001 per share, as constituted as of the effectiveness of this Amended and Restated Certificate of Incorporation, and shall also include any capital stock of any class of the Corporation thereafter authorized which shall neither be limited to a fixed sum or percentage of par value in respect of the rights of the holders thereof to participate in dividends nor entitled to a preference in the distribution of assets upon the voluntary or involuntary liquidation, dissolution or winding up of the Corporation; provided that the shares of Common Stock receivable upon conversion of shares of Preferred Stock shall include only shares designated as Common Stock of the Corporation on the date of filing of this instrument, or in case of any reorganization or reclassification of the outstanding shares thereof, the stock, securities or assets provided for in Section 6G.

6N. Mandatory Conversion. All outstanding shares of Preferred Stock shall automatically convert to shares of Common Stock (1) as of the date specified by written consent or agreement of the holders of a majority of the then-outstanding shares of Preferred Stock, voting as a single class and on an as-converted basis, or (2) at any time the Corporation shall effect a firm commitment underwritten public offering of shares of Common Stock in which (i) the aggregate net proceeds from such offering to the Corporation shall be at least $36,000,000 and (ii) the price paid by the public for such shares shall be at least $3.80 per share (appropriately adjusted for stock splits, stock dividends, stock combinations, recapitalizations and the like) (a "**Qualified Public Offering**"), in which case effective upon the closing of the sale of such shares by the Corporation pursuant to such Qualified Public Offering, all outstanding shares of Preferred Stock shall automatically convert to shares of Common Stock on the basis set forth in this Section 6 (but without regard to the procedural provisions of Section 6A or the provisions of Section 6B). Holders of shares of Preferred Stock which are automatically converted pursuant to this Section 6N may deliver to the Corporation at its principal office during its usual business hours, the certificate or certificates for the shares so converted. As promptly as practicable thereafter, the Corporation shall issue and deliver to such holder a certificate or certificates for the number of

whole shares of Common Stock to which such holder is entitled, together with payment in lieu of fractional shares to which such holder may be entitled pursuant to this Section 6 (provided that the aggregation provisions of Section 6B shall apply to such issuance and payment).

7. Reserved.

8. Definitions. As used herein, the following terms shall have the following meanings:

8A. The term "**Fair Market Value**" shall mean an amount equal to the fair market value of a share of Series A-1 Convertible Preferred Stock, as applicable (giving effect to the value of the rights and preferences of such shares as herein provided), determined as follows: the Board of Directors shall endeavor in good faith to agree to the fair market value of a share of Series A-1 Convertible Preferred Stock. If they are unable to do so within twenty (20) days after the occurrence of an event giving rise to a need to determine that fair market value, an unaffiliated nationally recognized investment banking firm chosen by the Corporation and approved by a majority of the members of the Board of Directors shall calculate such value. In all events, the fees and expenses of any such investment banking firms shall be paid by the Corporation.

8B. The term "**Investor Rights Agreement**" shall mean the Second Amended and Restated Investor Rights Agreement dated on or about the date hereof between the Corporation and the Investors named therein, as amended from time to time.

8C. The term "**Related Party**" shall mean any employee, officer, or director of the Corporation or member of any such employee, officer or director's immediate family, or any corporation, partnership or other entity in which any of the foregoing individuals is an officer, director or partner, or which any of the foregoing individuals has significant ownership interests or otherwise controls.

8D. The term "**Reserved Employee Shares**" shall mean shares of Common Stock and options, warrants and other rights to acquire Common Stock, and the Common Stock issued pursuant to such options, warrants and other rights (as adjusted for any stock splits, stock dividends, combinations, recapitalizations and the like) issued under the Corporation's 2003 Stock Incentive Plan, as adopted and approved by the Board of Directors of the Corporation, as amended from time to time, not to exceed in the aggregate 4,829,003 (appropriately adjusted for stock splits, stock dividends, combinations, reorganizations and the like). Subject to the provisions of clause (7) of Section 5 hereof, the number of Reserved Employee Shares may be increased by vote or written consent of the Board of Directors.

8E. The term "**Subsidiary**" shall mean any corporation, partnership, trust or other entity of which the Corporation and/or any of its other subsidiaries directly or indirectly owns at the time a majority of the outstanding shares of every class of equity security of such corporation, partnership, trust or other entity.

9. Certificates. Upon the surrender of any certificate representing shares of Preferred Stock at the principal office of the Corporation or at the office of any transfer agent of the Corporation for shares of Preferred Stock or at such other place as may be designated by the Corporation, the Corporation will, at the request of the record holder of such certificate, execute and deliver (at the Corporation's expense) a new certificate or certificates in exchange therefore representing in the aggregate the number of shares represented by the surrendered certificate.

ARTICLE VI

The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors. 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, except for liability (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General

Corporation Law, or (iv) for any transaction from which the director derived any improper personal benefit. If the Delaware General Corporation Law is amended after approval by the stockholders of this Article VI 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 Delaware General Corporation Law as so amended. To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) agents of the Corporation (and any other persons to which the Delaware General Corporation Law permits the Corporation to provide indemnification) through provisions in its Bylaws, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the Delaware General Corporation Law, subject only to limits created by applicable Delaware law, with respect to actions for breach of duty to this corporation, its stockholders and others. Any amendment, repeal or modification of the foregoing provisions of this Article VI by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to, any acts or omissions of such director occurring prior to such amendment, repeal or modification.

ARTICLE VII

The number of directors of the Corporation shall be such number as from time to time shall be fixed by, or in the manner provided in, the Bylaws of the Corporation. Unless and except to the extent that the Bylaws of the Corporation shall otherwise require, the election of directors of the Corporation need not be by written ballot. Except as otherwise provided in this Amended and Restated Certificate of Incorporation, each director of the Corporation shall be entitled to one vote per director on all matters voted or acted upon by the Board of Directors

ARTICLE VIII

Whenever a compromise or arrangement is proposed between the Corporation and its creditors or any class of them and/or between the Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of the Corporation or of any creditor or stockholder thereof or on the application of any receiver or receivers appointed for the Corporation under Section 291 of the Delaware General Corporation Law or on the application of trustees in dissolution or of any receiver or receivers appointed for the Corporation under Section 279 of the Delaware General Corporation Law order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of the Corporation, as the case may be, to be summoned in such manner as said court directs. If a majority in number representing three-fourths (3/4) in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of the Corporation, as the case may be, agree to any compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of the Corporation, as the case may be, and also on the Corporation.

ARTICLE IX

In furtherance and not in limitation of the powers conferred by the Delaware General Corporation Law and subject to Section 5 of Article V(B), the Board of Directors of the Corporation is expressly authorized and empowered to adopt, amend and repeal the bylaws of the Corporation.

ARTICLE X

Subject to Section 5 of Article V(B), the Corporation reserves the right at any time, and from time to time, to amend, alter, change, or repeal any provision contained in this Certificate of Incorporation, and other provisions authorized by the laws of the State of Delaware at the time in force may be added or inserted, in the manner now or hereafter prescribed by law; and all rights, preferences, and privileges of any nature conferred upon stockholders, directors, or any other persons by and pursuant to this Certificate of Incorporation in its present form or as hereafter amended are granted subject to the rights reserved in this **Article X.**

* * * * *

FOURTH: The foregoing amendment and restatement was approved by the holders of the requisite number of shares of the Corporation in accordance with Section 228 of the Delaware General Corporation Law.

FIFTH: That said Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of the Corporation's Restated Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the Delaware General Corporation Law.

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IN WITNESS WHEREOF, the undersigned, being the President and Chief Executive Officer of the Corporation, hereby certifies that the facts hereinabove stated are truly set forth, and accordingly executes this Amended and Restated Certificate of Incorporation on this 20th day of October, 2009.

/s/ Rachel K. King

Rachel K. King
President and Chief Executive Officer

GLYCOMIMETICS, INC.

AMENDED AND RESTATED BYLAWS

Adopted

as of

May 20, 2003

TABLE OF CONTENTS

AMENDED AND RESTATED

BYLAWS

OF

GLYCOMIMETICS, INC.

1. OFFICES

1.1. Registered Office

The initial registered office of the Corporation shall be in Wilmington, Delaware, and the initial registered agent in charge thereof shall be The Corporation Trust Company.

1.2. Other Offices

The Corporation may also have offices at such other places, both within and without the State of Delaware, as the Board of Directors may from time to time determine or as may be necessary or useful in connection with the business of the Corporation.

2. MEETINGS OF STOCKHOLDERS

2.1. Place of Meetings

All meetings of the stockholders shall be held at such place as may be fixed from time to time by the Board of Directors, the Chairman or the President. Notwithstanding the foregoing, the Board of Directors may determine that the meeting shall not be held at any place, but may instead be held by means of remote communication.

2.2. Annual Meetings

Unless directors are elected by written consent in lieu of an annual meeting, the Corporation shall hold annual meetings of stockholders, commencing with the year 2003, on such date and at such time as shall be designated from time to time by the Board of Directors, the Chairman or the President, at which stockholders shall elect a Board of Directors and transact such other business as may properly be brought before the meeting. If a written consent electing directors is less than unanimous, such action by written consent may be in lieu of holding an annual meeting only if all of the directorships to which directors could be elected at an annual meeting held at the effective time of such action are vacant and are filled by such action.

2.3. Special Meetings

Special meetings of the stockholders, for any purpose or purposes, unless otherwise prescribed by statute, may be called by any two members of the Board of Directors, the Chairman, the President or any holder or holders of at least 25% of the outstanding Preferred Shares (as such term is defined in that certain Investor Rights Agreement dated as of May 20, 2003 by and among the Corporation and the investors identified therein).

2.4. Notice of Meetings

Notice of any meeting of stockholders, stating the place, if any, date and hour of the meeting, the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, and (if it is a special meeting) the purpose or purposes for which the meeting is called, shall be given to each stockholder entitled to vote at such meeting not less than ten nor more than sixty days before the date of the meeting (except to the extent that such notice is waived or is not required as provided in the General Corporation Law of the State of Delaware (the "**Delaware General Corporation Law**") or these Bylaws). Such notice shall be given in accordance with, and shall be deemed effective as set forth in, Sections 222 and 232 (or any successor section or sections) of the Delaware General Corporation Law.

2.5. Waivers of Notice

Whenever the giving of any notice is required by statute, the Certificate of Incorporation or these Bylaws, a written waiver thereof signed by the person or persons entitled to said notice, or a waiver thereof by electronic transmission by the person entitled to said notice, delivered to the Corporation, whether before or after the event as to which such notice is required, shall be deemed equivalent to notice. Attendance of a stockholder at a meeting shall constitute a waiver of notice (1) of such meeting, except when the stockholder at the beginning of the meeting objects to holding the meeting or transacting business at the meeting, and (2) (if it is a special meeting) of consideration of a particular matter at the meeting that is not within the purpose or purposes described in the meeting notice, unless the stockholder objects to considering the matter at the beginning of the meeting.

2.6. Business at Special Meetings

Business transacted at any special meeting of stockholders shall be limited to the purposes stated in the notice (except to the extent that such notice is waived or is not required as provided in the Delaware General Corporation Law or these Bylaws).

2.7. List of Stockholders

After the record date for a meeting of stockholders has been fixed, at least ten days before such meeting, the officer who has charge of the stock ledger of the Corporation shall make a list of all stockholders entitled to vote at the meeting, arranged in alphabetical order and showing the address of each stockholder (but not the electronic mail address or other electronic contact information, unless the Board of Directors so directs) and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder for any purpose germane to the meeting for a period of at least ten days prior to the meeting (1) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (2) during ordinary business hours, at the principle place of business of the Corporation. If the meeting is to be held at a place, then such list shall also, for the duration of the meeting, be produced and kept open to the examination of any stockholder who is present at the time and place of the meeting If the meeting is to be held solely by means of remote communication, then such list shall also be open to the examination of any stockholder during the whole time of the meeting on reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

2.8. Quorum at Meetings

Stockholders may take action on a matter at a meeting only if a quorum exists with respect to that matter. Except as otherwise provided by statute or by the Certificate of Incorporation, the holders of a majority of the shares entitled to vote at the meeting, and who are present in person or represented by proxy,

shall constitute a quorum at all meetings of the stockholders for the transaction of business. Where a separate vote by a class or series or classes or series is required, a majority of the outstanding shares of such class or series or classes or series, present in person or represented by proxy, shall constitute a quorum entitled to take action with respect to that vote on that matter. Once a share is represented for any purpose at a meeting (other than solely to object (1) to holding the meeting or transacting business at the meeting, or (2) (if it is a special meeting) to consideration of a particular matter at the meeting that is not within the purpose or purposes described in the meeting notice), it is deemed present for quorum purposes for the remainder of the meeting and for any adjournment of that meeting unless a new record date is or must be set for the adjourned meeting. The holders of a majority of the voting shares represented at a meeting, whether or not a quorum is present, may adjourn such meeting from time to time.

2.9. Voting and Proxies

Unless otherwise provided in the Delaware General Corporation Law or in the Corporation's Certificate of Incorporation, and subject to the other provisions of these Bylaws, each stockholder shall be entitled to one vote on each matter, in person or by proxy, for each share of the Corporation's capital stock that has voting power and that is held by such stockholder. No proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A duly executed appointment of proxy shall be irrevocable if the appointment form states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. If authorized by the Board of Directors, and subject to such guidelines as the Board of Directors may adopt, stockholders and proxyholders not physically present at a meeting of stockholders may, by means of remote communication, participate in a meeting of stockholders and be deemed present in person and vote at such meeting whether such meeting is held at a designated place or solely by means of remote communication, provided that (1) the Corporation implements reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxyholder, (2) the Corporation implements reasonable measures to provide such stockholders and proxyholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the stockholders, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (3) if any stockholder or proxyholder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action is maintained by the Corporation.

2.10. Required Vote

When a quorum is present at any meeting of stockholders, all matters shall be determined, adopted and approved by the affirmative vote (which need not be by ballot) of the holders of a majority of the shares present in person or represented by proxy at the meeting and entitled to vote with respect to the matter, unless the proposed action is one upon which, by express provision of statutes or of the Certificate of Incorporation, a different vote is specified and required, in which case such express provision shall govern and control with respect to that vote on that matter. Where a separate vote by a class or classes is required, the affirmative vote of the holders of a majority of the shares of such class or classes present in person or represented by proxy at the meeting shall be the act of such class Notwithstanding the foregoing, directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors.

2.11. Action Without a Meeting

Any action required or permitted to be taken at a stockholders' meeting may be taken without a meeting, without prior notice and without a vote, if the action is taken by persons who would be entitled to vote at a meeting and who hold shares having voting power equal to not less than the minimum number of votes that would be necessary to authorize or take the action at a meeting at which all shares entitled to vote were present and voted. The action must be evidenced by one or more written consents describing the action taken, signed by

the stockholders entitled to take action without a meeting, and delivered to the Corporation in the manner prescribed by the Delaware General Corporation Law for inclusion in the minute book. No consent shall be effective to take the corporate action specified unless the number of consents required to take such action are delivered to the Corporation within sixty days of the delivery of the earliest-dated consent. A telegram, cablegram or other electronic transmission consenting to such action and transmitted by a stockholder or proxyholder, or by a person or persons authorized to act for a stockholder or proxyholder, shall be deemed to be written, signed and dated for the purposes of this **Section 2.11**, provided that any such telegram, cablegram or other electronic transmission sets forth or is delivered with information from which the Corporation can determine (1) that the telegram, cablegram or other electronic transmission was transmitted by the stockholder or proxyholder or by a person or persons authorized to act for the stockholder or proxyholder and (2) the date on which such stockholder or proxyholder or authorized person or persons transmitted such telegram, cablegram or electronic transmission. The date on which such telegram, cablegram or electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by telegram, cablegram or other electronic transmission shall be deemed to have been delivered until such consent is delivered to the Corporation in accordance with Section 228(d)(1) of the Delaware General Corporation Law. Written notice of the action taken shall be given in accordance with the Delaware General Corporation Law to all stockholders who do not participate in taking the action who would have been entitled to notice if such action had been taken at a meeting having a record date on the date that written consents signed by a sufficient number of holders to take the action were delivered to the Corporation.

3. DIRECTORS

3.1. Powers

The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors, which may exercise all such powers of the Corporation and do all such lawful acts and things, subject to any limitation set forth in the Certificate of Incorporation or as otherwise may be provided in the Delaware General Corporation Law.

3.2. Number and Election

The number of directors which shall constitute the whole Board of Directors shall not be fewer than one nor more than seven. The first Board of Directors shall consist of two directors. Thereafter, within the limits above specified, the number of directors shall be determined by resolution of the Board of Directors.

3.3. Nomination of Directors

The Board of Directors shall nominate candidates to stand for election as directors; and other candidates also may be nominated by any Corporation stockholder, provided such other nomination(s) are submitted in writing to the Secretary of the Corporation no later than 90 days prior to the meeting of stockholders at which such directors are to be elected, together with the identity of the nominator and the number of shares of the Corporation’s stock owned, directly or indirectly, by the nominator. The directors shall be elected at the annual meeting of the stockholders, except as provided in **Section 3.4** hereof, and each director elected shall hold office until such director’s successor is elected and qualified or until the director’s earlier death, resignation or removal. Directors need not be stockholders.

3.4. Vacancies

Vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class may be filled by the

affirmative vote of a majority of the directors then in office, although fewer than a quorum, or by a sole remaining director. Whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the Certificate of Incorporation, vacancies and newly created directorships of such class or classes or series may be filled by the affirmative vote of a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected. Each director so chosen shall hold office until the next election of directors of the class to which such director was appointed, and until such director's successor is elected and qualified, or until the director's earlier death, resignation or removal. In the event that one or more directors resign from the Board of Directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office until the next election of directors, and until such director's successor is elected and qualified, or until the director's earlier death, resignation or removal.

3.5. Meetings

3.5.1. Regular Meetings

Regular meetings of the Board of Directors may be held without notice at such time and at such place as shall from time to time be determined by the Board of Directors.

3.5.2. Special Meetings

Special meetings of the Board of Directors may be called by the Chairman, the President, any two members of the Board of Directors, or any holder or holders of at least 25% of the outstanding Preferred Shares (as such term is defined in that certain Investor Rights Agreement, dated as of May 20, 2003, by and among the Corporation and the investors identified therein) on one day's notice to each director, either personally or by telephone, express delivery service (so that the scheduled delivery date of the notice is at least one day in advance of the meeting), telegram or facsimile transmission, and on five days' notice by mail (effective upon deposit of such notice in the mail). The notice need not describe the purpose of a special meeting.

3.5.3. Telephone Meetings

Members of the Board of Directors may participate in a meeting of the Board of Directors by any communication by means of which all participating directors can simultaneously hear each other during the meeting. A director participating in a meeting by this means is deemed to be present in person at the meeting.

3.5.4. Action Without Meeting

Any action required or permitted to be taken at any meeting of the Board of Directors may be taken without a meeting if the action is taken by all members of the Board of Directors. The action must be evidenced by one or more consents in writing or by electronic transmission describing the action taken, signed by each director, and delivered to the Corporation for inclusion in the minute book.

3.5.5. Waiver of Notice of Meeting

A director may waive any notice required by statute, the Certificate of Incorporation or these Bylaws before or after the date and time stated in the notice Except as set forth below, the waiver must be in writing, signed by the director entitled to the notice, or made by electronic transmission by the director entitled to the notice, and delivered to the Corporation for inclusion in the minute book. Notwithstanding the foregoing, a director's attendance at or participation in a meeting waives any required notice to the director of the meeting unless the director at the beginning of the meeting objects to holding the meeting or transacting business at the meeting and does not thereafter vote for or assent to action taken at the meeting.

3.6. Quorum and Vote at Meetings

At all meetings of the Board of Directors, a quorum of the Board of Directors consists of a majority of the total number of directors prescribed pursuant to **Section 3.2** of these Bylaws. The vote of a majority of the directors present at any meeting at which there is a quorum shall be the act of the Board of Directors, except as may be otherwise specifically provided by statute or by the Certificate of Incorporation or by these Bylaws.

3.7. Committees of Directors

The Board of Directors may designate one or more committees, each committee to consist of one or more directors. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. If a member of a committee shall be absent from any meeting, or disqualified from voting thereat, the remaining member or members present and not disqualified from voting, whether or not such member or members constitute a quorum, may, by unanimous vote, appoint another member of the Board of Directors to act at the meeting in the place of such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board of Directors, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to approving or adopting, or recommending to the stockholders, any action or matter expressly required by the Delaware General Corporation Law to be submitted to stockholders for approval or adopting, amending or repealing any bylaw of the Corporation; and unless the resolution designating the committee, these Bylaws or the Certificate of Incorporation expressly so provide, no such committee shall have the power or authority to declare a dividend, to authorize the issuance of stock, or to adopt a certificate of ownership and merger pursuant to Section 253 of the Delaware General Corporation Law. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the Board of Directors. Each committee shall keep regular minutes of its meetings and report the same to the Board of Directors, when required. Unless otherwise specified in the Board of Directors resolution appointing the Committee, all provisions of the Delaware General Corporation Law and these Bylaws relating to meetings, action without meetings, notice (and waiver thereof), and quorum and voting requirements of the Board of Directors apply, as well, to such committees and their members.

3.8. Compensation of Directors

The Board of Directors shall have the authority to fix the compensation of directors. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefor.

4. OFFICERS

4.1. Positions

The officers of the Corporation shall be a Chairman, Chief Executive Officer, a President, a Secretary and a Treasurer, and such other officers as the Board of Directors (or an officer authorized by the Board of Directors) from time to time may appoint, including, without limitation, one or more Vice Chairmen, Executive Vice Presidents, Vice Presidents, Assistant Secretaries and Assistant Treasurers. Each such officer shall exercise such powers and perform such duties as shall be set forth below and such other powers and duties as from time to time may be specified by the Board of Directors or by any officer(s) authorized by the Board of Directors to prescribe the duties of such other officers. Any number of offices may be held by the same person, except that in no event shall the President and the Secretary be the same person. As set forth below, each of the

Chairman, Chief Executive Officer, President, and/or any Vice President may execute bonds, mortgages and other contracts under the seal of the Corporation, if required, except where required or permitted by law to be otherwise executed and except where the execution thereof shall be expressly delegated by the Board of Directors to some other officer or agent of the Corporation.

4.2. Chairman

The Chairman shall (when present) preside at all meetings of the Board of Directors and stockholders, and shall ensure that all orders and resolutions of the Board of Directors and stockholders are carried into effect. The Chairman may execute bonds, mortgages and other contracts, under the seal of the Corporation, if required, except where required or permitted by law to be otherwise signed and executed and except where the signing and execution thereof shall be expressly delegated by the Board of Directors to some other officer or agent of the Corporation.

4.3. Chief Executive Officer

The Chief Executive Officer of the Corporation shall see that all orders and resolutions of the Board of Directors are carried into effect and shall oversee the strategic planning and policy development of the Corporation. In the event the position of Chairman shall not be occupied or the Chairman shall be absent or otherwise unable to act, the Chief Executive Officer shall preside at meetings of the stockholders and directors and shall discharge the duties of the presiding officer. The Chief Executive Officer shall have the authority to execute bonds, mortgages and other contracts requiring a seal, under the seal of the Corporation, except where required by law to be otherwise signed and executed and except where the signing and execution thereof shall be expressly delegated by the Board of Directors to some other officer or agent of the Corporation. The Chief Executive Officer shall perform other duties commonly incident to this office and shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

4.4. President

The President shall be the chief operating officer of the Corporation and shall have full responsibility and authority for management of the day-to-day operations of the Corporation, subject to the authority of the Board of Directors and Chief Executive Officer. The President may execute bonds, mortgages and other contracts, under the seal of the Corporation, if required, except where required or permitted by law to be otherwise signed and executed and except where the signing and execution thereof shall be expressly delegated by the Board of Directors to some other officer or agent of the Corporation.

4.5. Vice President

In the absence of the President or in the event of the President’s inability or refusal to act, the Vice President (or in the event there be more than one Vice President, the Vice Presidents in the order designated, or in the absence of any designation, then in the order of their election) shall perform the duties of the President, and when so acting shall have all the powers of, and be subject to all the restrictions upon, the President.

4.6. Secretary

The Secretary shall have responsibility for preparation of minutes of meetings of the Board of Directors and of the stockholders and for authenticating records of the Corporation. The Secretary shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the Board of Directors. The Secretary or an Assistant Secretary may also attest all instruments signed by any other officer of the Corporation.

4.7. Assistant Secretary

The Assistant Secretary, or if there be more than one, the Assistant Secretaries in the order determined by the Board of Directors (or if there shall have been no such determination, then in the order of their election), shall, in the absence of the Secretary or in the event of the Secretary's inability or refusal to act, perform the duties and exercise the powers of the Secretary.

4.8. Treasurer

The Treasurer shall be the chief financial officer of the Corporation and shall have responsibility for the custody of the corporate funds and securities and shall see to it that full and accurate accounts of receipts and disbursements are kept in books belonging to the Corporation. The Treasurer shall render to the Chairman, the President, and the Board of Directors, upon request, an account of all financial transactions and of the financial condition of the Corporation.

4.9. Assistant Treasurer

The Assistant Treasurer, or if there shall be more than one, the Assistant Treasurers in the order determined by the Board of Directors (or if there shall have been no such determination, then in the order of their election), shall, in the absence of the Treasurer or in the event of the Treasurer's inability or refusal to act, perform the duties and exercise the powers of the Treasurer.

4.10. Term of Office

The officers of the Corporation shall hold office until their successors are chosen and qualify or until their earlier resignation or removal. Any officer may resign at any time upon written notice to the Corporation. Any officer elected or appointed by the Board of Directors may be removed at any time, with or without cause, by the affirmative vote of a majority of the Board of Directors.

4.11. Compensation

The compensation of officers of the Corporation shall be fixed by the Board of Directors or by any officer(s) authorized by the Board of Directors to prescribe the compensation of such other officers.

4.12. Fidelity Bonds

The Corporation may secure the fidelity of any or all of its officers or agents by bond or otherwise.

5. CAPITAL STOCK

5.1. Certificates of Stock; Uncertificated Shares

The shares of the Corporation shall be represented by certificates, provided that the Board of Directors may provide by resolution that some or all of any or all classes or series of the Corporation's stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the Corporation. Notwithstanding the adoption of such a resolution by the Board of Directors, every holder of stock represented by certificates, and upon request every holder of uncertificated shares, shall be entitled to have a certificate (representing the number of shares registered in certificate form) signed in the name of the Corporation by the Chairman, President or any Vice President, and by

the Treasurer, Secretary or any Assistant Treasurer or Assistant Secretary of the Corporation. Any or all the signatures on the certificate may be facsimile. In case any officer, transfer agent or registrar whose signature or facsimile signature appears on a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue.

5.2. Lost Certificates

The Board of Directors, Chairman, President or Secretary may direct a new certificate of stock to be issued in place of any certificate theretofore issued by the Corporation and alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming that the certificate of stock has been lost, stolen or destroyed. When authorizing such issuance of a new certificate, the Board of Directors or any such officer may, as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate or certificates, or such owner's legal representative, to advertise the same in such manner as the Board of Directors or such officer shall require and/or to give the Corporation a bond or indemnity, in such sum or on such terms and conditions as the Board of Directors or such officer may direct, as indemnity against any claim that may be made against the Corporation on account of the certificate alleged to have been lost, stolen or destroyed or on account of the issuance of such new certificate or uncertificated shares.

5.3. Record Date

5.3.1. Actions by Stockholders

In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than sixty days nor less than ten days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting, unless the Board of Directors fixes a new record date for the adjourned meeting.

In order that the Corporation may determine the stockholders entitled to consent to corporate action in writing without a meeting, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than ten days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. If no record date has been fixed by the Board of Directors, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is required by the Delaware General Corporation Law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Corporation in the manner prescribed by Section 213(b) of the Delaware General Corporation Law. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by the Delaware General Corporation Law, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting shall be at the close of business on the day on which the Board of Directors adopts the resolution taking such prior action.

5.3.2. Payments

In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in

respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than sixty days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

5.4. Stockholders of Record

The Corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, to receive notifications, to vote as such owner, and to exercise all the rights and powers of an owner. The Corporation shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise may be provided by the Delaware General Corporation Law.

6. INDEMNIFICATION; INSURANCE

6.1. Authorization of Indemnification

Each person who was or is a party or is threatened to be made a party to or is involved in any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative and whether by or in the right of the Corporation or otherwise (a "proceeding"), by reason of the fact that he or she, or a person of whom he or she is the legal representative, is or was a director or officer of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee, partner (limited or general) or agent of another corporation or of a partnership, joint venture, limited liability company, trust or other enterprise, including service with respect to an employee benefit plan, shall be (and shall be deemed to have a contractual right to be) indemnified and held harmless by the Corporation (and any successor to the Corporation by merger or otherwise) to the fullest extent authorized by, and subject to the conditions and (except as provided herein) procedures set forth in the Delaware General Corporation Law, as the same exists or may hereafter be amended (but any such amendment shall not be deemed to limit or prohibit the rights of indemnification hereunder for past acts or omissions of any such person insofar as such amendment limits or prohibits the indemnification rights that said law permitted the Corporation to provide prior to such amendment), against all expenses, liabilities and losses (including attorneys' fees, judgments, fines, ERISA taxes or penalties and amounts paid or to be paid in settlement) reasonably incurred or suffered by such person in connection therewith; provided, however, that the Corporation shall indemnify any such person seeking indemnification in connection with a proceeding (or part thereof) initiated by such person (except for a suit or action pursuant to **Section 6.2** hereof) only if such proceeding (or part thereof) was authorized by the Board of Directors of the Corporation. Persons who are not directors or officers of the Corporation and are not so serving at the request of the Corporation may be similarly indemnified in respect of such service to the extent authorized at any time by the Board of Directors of the Corporation. The indemnification conferred in this Section 6.1 also shall include the right to be paid by the Corporation (and such successor) the expenses (including attorneys' fees) incurred in the defense of or other involvement in any such proceeding in advance of its final disposition, provided, however, that, if and to the extent the Delaware General Corporation Law requires, the payment of such expenses (including attorneys' fees) incurred by a director or officer in advance of the final disposition of a proceeding shall be made only upon delivery to the Corporation of an undertaking by or on behalf of such director or officer to repay all amounts so paid in advance if it shall ultimately be determined that such director or officer is not entitled to be indemnified under this **Section 6.1** or otherwise; and provided further, that, such expenses incurred by other employees and agents may be so paid in advance upon such terms and conditions, if any, as the Board of Directors deems appropriate.

6.2. Right of Claimant to Bring Action Against the Corporation

If a claim under **Section 6.1** is not paid in full by the Corporation within sixty days after a written claim has been received by the Corporation, the claimant may at any time thereafter bring an action against the Corporation to recover the unpaid amount of the claim and, if successful in whole or in part, the claimant shall be entitled to be paid also the expense of prosecuting such action. It shall be a defense to any such action (other than an action brought to enforce a claim for expenses incurred in connection with any proceeding in advance of its final disposition where the required undertaking, if any is required, has been tendered to the Corporation) that the claimant has not met the standards of conduct which make it permissible under the Delaware General Corporation Law for the Corporation to indemnify the claimant for the amount claimed or is otherwise not entitled to indemnification under **Section 6.1**, but the burden of proving such defense shall be on the Corporation. The failure of the Corporation (in the manner provided under the Delaware General Corporation Law) to have made a determination prior to or after the commencement of such action that indemnification of the claimant is proper in the circumstances because he or she has met the applicable standard of conduct set forth in the Delaware General Corporation Law shall not be a defense to the action or create a presumption that the claimant has not met the applicable standard of conduct. Unless otherwise specified in an agreement with the claimant, an actual determination by the Corporation (in the manner provided under the Delaware General Corporation Law) after the commencement of such action that the claimant has not met such applicable standard of conduct shall not be a defense to the action, but shall create a presumption that the claimant has not met the applicable standard of conduct.

6.3. Non-exclusivity

The rights to indemnification and advance payment of expenses provided by **Section 6.1** hereof shall not be deemed exclusive of any other rights to which those seeking indemnification and advance payment of expenses may be entitled under any by-law, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his or her official capacity and as to action in another capacity while holding such office.

6.4. Survival of Indemnification

The indemnification and advance payment of expenses and rights thereto provided by, or granted pursuant to, **Section 6.1** hereof shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee, partner or agent and shall inure to the benefit of the personal representatives, heirs, executors and administrators of such person.

6.5. Insurance

The Corporation shall have power to 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, partner (limited or general) or agent of another corporation or of a partnership, joint venture, limited liability company, trust or other enterprise, against any liability asserted against such person or incurred by such person in any such capacity, or arising out of such person’s status as such, and related expenses, whether or not the Corporation would have the power to indemnify such person against such liability under the provisions of the Delaware General Corporation Law.

7. GENERAL PROVISIONS

7.1. Inspection of Books and Records

Any stockholder, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose the Corporation's stock ledger, a list of its stockholders, and its other books and records, and to make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person's interest as a stockholder. In every instance where an attorney or other agent shall be the person who seeks the right to inspection, the demand under oath shall be accompanied by a power of attorney or such other writing which authorizes the attorney or other agent to so act on behalf of the stockholder. The demand under oath shall be directed to the Corporation at its registered office or at its principal place of business.

7.2. Dividends

The Board of Directors may declare dividends upon the capital stock of the Corporation, subject to the provisions of the Certificate of Incorporation and the laws of the State of Delaware.

7.3. Reserves

The directors of the Corporation may set apart, out of the funds of the Corporation available for dividends, a reserve or reserves for any proper purpose and may abolish any such reserve.

7.4. Execution of Instruments

All checks, drafts or other orders for the payment of money, and promissory notes of the Corporation shall be signed by such officer or officers or such other person or persons as the Board of Directors may from time to time designate.

7.5. Fiscal Year

The fiscal year of the Corporation shall be fixed by resolution of the Board of Directors.

7.6. Seal

The corporate seal shall be in such form as the Board of Directors shall approve. The seal may be used by causing it or a facsimile thereof to be impressed or affixed or otherwise reproduced.

* * * * *

The foregoing Amended and Restated Bylaws were adopted by the Board of Directors as of May 21, 2003.

/s/ John Magnani, Ph.D.
John Magnani, Ph.D.
Secretary

Exhibit 10.1

LICENSE AGREEMENT

between

GLYCOMIMETICS, INC.

and

PFIZER INC.

dated as of October 7, 2011

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LICENSE AGREEMENT

THIS LICENSE AGREEMENT dated as of the 7th day of October, 2011 (the "Agreement") is made between GlycoMimetics, Inc., a Delaware corporation having a place of business at 401 Professional Drive, Suite 250, Gaithersburg, Maryland 20879 ("GMI") and Pfizer Inc., a Delaware corporation having its principal place of business at 235 East 42nd Street, New York, New York 10017 ("Pfizer").

RECITALS

WHEREAS, GMI owns or otherwise controls the Compound (as defined below) and Licensed Product (as defined below) and GMI desires to grant an exclusive license to Pfizer in the Territory (as defined below) with respect thereto; and

WHEREAS, Pfizer has extensive experience and expertise in the development and commercialization of pharmaceutical products and desires to obtain such an exclusive license in the Territory to the Compound and the Licensed Product.

NOW THEREFORE, in consideration of the premises and of the covenants herein contained, the Parties hereto mutually agree as follows:

Article 1 DEFINITIONS

For purposes of this Agreement, the terms defined in this Article shall have the meanings specified below, whether used in their singular or plural form.

1.1 "Additional Ongoing Clinical Trial Costs" has the meaning set forth in Section 3.1(c).

1.2 "Additional Phase II Clinical Trial" has the meaning as set forth in Section 3.2(b).

1.3 "Affiliate" means with respect to a Person, any Person that controls, is controlled by or is under common control with such first Person. For purposes of this definition only, "control" means (a) to possess, directly or indirectly, the power to direct the management or policies of a Person, whether through ownership of voting securities, by contract relating to voting rights or corporate governance, or (b) to own, directly or indirectly, more than fifty percent (50%) of the outstanding voting securities or other ownership interest of such Person.

Notwithstanding the foregoing, (i) venture capital and other institutional financial investors in GMI (including venture capital and other funds, and their investors and managers), and (ii) any Person that is under common control with GMI as a result of control of such Person and GMI by such venture capital or other financial investor in GMI of part (i), in each case, shall not be considered Affiliates of GMI for purposes of this Agreement.

1.4 "Business Day" means each day of the week, excluding Saturday, Sunday, and bank or other public holidays in New York, New York.

1.5 "Change of Control" means, with respect to a Party or its parent corporation, (a) a merger or consolidation of such Party or such parent corporation with a Third Party which results in the voting securities of such Party or such parent corporation outstanding immediately prior thereto ceasing to represent at least fifty percent (50%) of the combined voting power of the surviving entity immediately after such merger or consolidation, or (b) a transaction or series of related transactions in which a Third Party, together with its Affiliates, becomes the beneficial owner of fifty percent (50%) or more of the combined voting power of the outstanding securities of such Party or such parent corporation, or (c) the sale or other transfer to a Third Party of all or substantially all of such Party's assets or business or substantially all of such Party's business which encompasses the Compound or Licensed Product.

1.6 "Combination Product" means a Licensed Product that in a single formulation or in a single package contains both a Compound and one or more Other Active Compounds.

1.7 "Commercially Reasonable Efforts" means, (i) with respect to development of a Licensed Product, efforts and resources that are reasonably sufficient, as measured by the facts and circumstances at the time such efforts and resources are carried out, to obtain Regulatory Approval in a reasonable period of time, which efforts and resources and reasonable period of time takes into account anticipated product labeling, medical and clinical considerations, safety, efficacy and regulatory environment, and present and future market potential and other reasonably relevant factors, and (ii) with respect to marketing and selling of a Licensed Product, efforts and resources, as measured by the facts and circumstances at the time such efforts and resources are carried out, that are consistent with present and future market potential, financial return, labeling, channels of trade, competitive market conditions, historical performance of the Licensed Product, regulatory requirements, applicable Laws and other reasonably relevant factors.

1.8 "Competing Product" has the meaning set forth in Article 10.

1.9 "Completion of the Ongoing Clinical Trial" means delivery of the Topline Study Report to Pfizer by or on behalf of GMI.

1.10 "Compound" means (i) GMI-1070 and all modifications, enhancements, improvements and backups which result in a [* * *], pan selectin antagonist [* * *] and (ii) [* * *] of any of the compounds of subpart (i) of this Section 1.10 that are a [* * *], pan selectin antagonist [* * *]. For the avoidance of doubt, Compounds include without limitation the backups specified in Schedule 1.10.

1.11 "Dollars" or "$" means the legal tender of the United States.

1.12 "Effective Date" means the date first hereinabove written.

1.13 "EMA" means the European Medicines Evaluation Agency or any successor thereto.

1.14 "Excluded GMI Affiliate Patent Rights" means any Patent Right owned or controlled by a Future Affiliate of GMI, to the extent, but only to the extent, that such Patent Right:

(i) is not controlled by such Future Affiliate pursuant to any license or other grant of rights by GMI (or any Affiliate of GMI other than a Future Affiliate of GMI) to such Future Affiliate; and

(ii) (A) is owned or controlled by such Future Affiliate of GMI at the time such Future Affiliate becomes an Affiliate of GMI or (B) is subsequently owned or controlled by such Future Affiliate but is developed independently of and without the use of any GMI Patent Right or GMI Know-how controlled by GMI (or any Affiliate of GMI other than a Future Affiliate of GMI) at the time such Future Affiliate becomes an Affiliate of GMI.

1.15 "FDA" means the United States Food and Drug Administration or any successor agency in the United States with responsibilities comparable to those of the United States Food and Drug Administration.

1.16 "Field" means any and all fields of use.

1.17 "First Commercial Sale" means the first sale of a Licensed Product by (i) Pfizer or its Affiliate or Sublicensee or (ii) with respect to Section 9.6, GMI or its Affiliates or Sublicensee, in each case to a Third Party in a country following Regulatory Approval (to the extent necessary for commercial sale, and, in any country in which Pricing Approval is necessary or relevant for a majority of the population to obtain access to pharmaceutical products, Pricing Approval) of such Licensed Product in such country.

1.18 "First Indication" means Sickle Cell Disease.

1.19 "Future Affiliate" means, with respect to either Party, a Third Party that is not an Affiliate of such Party as of the Effective Date but that subsequently becomes an Affiliate of such Party as a result of a Change of Control of such Party.

1.20 "GAAP" means United States generally accepted accounting principles as applicable to each Party, consistently applied.

1.21 "Generic Product" means any pharmaceutical product that (i) is sold by a Third Party that is not a licensee or Sublicensee of Pfizer or its Affiliates, or any of their licensees or Sublicensees under a marketing authorization granted by a Regulatory Authority to such Third Party, and (ii) contains the same Compound as an active pharmaceutical ingredient as the relevant Licensed Product and (x) for purposes of the United States, is approved through an Abbreviated New Drug Application or successor or similar process by reliance on the prior approval of a Licensed Product as determined by the FDA, or (y) for purposes of a country outside the United States, is approved through an abbreviated process in reliance on the prior approval of a Licensed Product as determined by the applicable Regulatory Authority.

1.22 "GMI-1070" means each of the compounds described in Schedule 1.22, [* * *].

1.23 "GMI Excluded Patent Rights" means Patent Rights owned by GMI that cover an Other Active Compound and/or manufacture or use thereof independent of a Compound.

1.24 "GMI Indemnitees" has the meaning set forth in Section 8.1.

1.25 "GMI Know-How" means (i) Know-How owned by or licensed to GMI as of the Effective Date and (ii) Know-How owned by GMI after the Effective Date that is developed prior to Completion of the Ongoing Clinical Trial, obtained as a result of or in connection with any trials with respect to the Compound, and in either case which is useful for the manufacture, research or development of any Compound.

1.26 "GMI Net Sales" means with respect to a Licensed Product, the gross amount invoiced by GMI and/or its Affiliates and/or its sublicensees of such Licensed Product to Third Parties, less (i) [* * *] and (ii) [* * *]. In the case of Combination Products: (1) if GMI and/or its Affiliates and/or its sublicensees of such Licensed Product [* * *] and [* * *], the GMI Net Sales attributable to such Combination Product during such year shall be calculated by [* * *]; (2) if GMI and/or its Affiliates and/or its sublicensees of such Licensed Product [* * *], the GMI Net Sales attributable to such Combination Product during such year shall be calculated by [* * *]; and (3) if GMI and/or its Affiliates and/or it sublicensees of such Licensed Product [* * *], then the GMI Net Sales attributable to such Combination Product shall be [* * *]; *provided*, that the quarterly report provided by GMI with respect to GMI Net Sales in accordance with Section 9.6 shall include the calculations for subclauses (1), (2) and (3) above.

GMI Net Sales shall be determined from the books and records maintained in accordance with GAAP, as consistently applied by GMI. The calculation of GMI Net Sales will involve the use of estimates for certain deductions above. Those estimates will be accrued and GMI Net Sales trued-up at least quarterly to actual in accordance with GAAP and GMI's internal accounting policies, as consistently applied.

1.27 "GMI Patent Rights" means Patent Rights, other than Excluded GMI Affiliate Patent Rights, (i) owned by GMI or licensed to GMI with the right to grant a sublicense, in each case as of the Effective Date and in each case to the extent such Patent Rights cover a Compound or the manufacture or use thereof and/or a Licensed Product and/or the manufacture or use thereof, but excluding claims that cover an Other Active Compound and/or manufacture or use thereof independent of a Compound and (ii) Patent Rights that are not GMI Excluded Patent Rights and are owned by GMI after the Effective Date and prior to the end of the Term, in each of the foregoing cases to the extent such Patent Rights cover a Compound or the manufacture or use thereof and/or a Licensed Product and/or the manufacture or use thereof, and wherein the GMI Patent Rights defined herein include those set forth in Exhibit A which shall be supplemented as necessary by GMI.

1.28 “Governmental Authority” means any court, agency, department, authority or other instrumentality of any national, state, county, city or other political subdivision.

1.29 “Indemnitee” has the meaning set forth in Section 8.3.

1.30 “IND” means an Investigational New Drug, Application or similar application or submission for approval to conduct human clinical investigations that is filed or submitted to a Regulatory Authority.

1.31 “Invention” means all inventions, discoveries, improvements and other technology, whether or not patentable.

1.32 “JDT” has the meaning set forth in Section 3.1.

1.33 “JSC” has the meaning set forth in Section 3.2(b).

1.34 “Know-How” means ideas, writings, data (including but not limited to pre-clinical and clinical data), methods, techniques, materials, information (including scientific and technical information), know-how, assays, compounds, and Inventions and the rights thereto other than Patent Rights, including but not limited to manufacturing and formulation information, whether or not patentable.

1.35 “Knowledge” means with respect to a Party, the actual knowledge of the officers and agents of such Party, without conducting an investigation other than making inquiries of their attorneys. The officers and agents of GMI with respect to this definition are limited to those individuals listed on Part A of Schedule 1.35, and the attorneys as to which GMI made inquiries are limited to those on Part B of Schedule 1.35.

1.36 “Law” or “Laws” means all laws, statutes, rules, regulations, orders, judgments and/or ordinances of any Governmental Authority.

1.37 “Licensed Product” means (a) the Compound and (b) any pharmaceutical product, in all dosage forms and formulations, that contains a Compound the manufacture, sale, offer for sale, importation, or use of which (i) is covered by a Valid Claim of GMI Patent Rights and/or (ii) embodies or incorporates GMI Know-How or is derived or results from the use of GMI Know-How. For the avoidance of doubt, “Licensed Product” shall also collectively refer to Combination Product.

1.38 “Litigation Conditions” has the meaning set forth in Section 8.4.

1.39 “Losses” has the meaning set forth in Section 8.1.

1.40 “Major Country of Europe” means each of [* * *] and [* * *].

1.41 “Net Sales” means, with respect to a Licensed Product, the gross amount invoiced by Pfizer, its Affiliates and its Sublicensees for such Licensed Product to Third Parties, less (i) [* * *] and (ii) [* * *]. In the case of Combination Products: (1) if Pfizer and/or its Affiliates or Sublicensees [* * *], the Net Sales attributable to such Combination Product during such year shall be calculated by [* * *]; (2) if Pfizer and/or its Affiliates or Sublicensees [* * *], the Net Sales attributable to such Combination Product during such year shall be calculated [* * *]; and (3) if Pfizer and/or its Affiliates or Sublicensees [* * *], then the Net Sales attributable to such Combination Product shall be [* * *]; *provided*, that the quarterly report provided by Pfizer with respect to Net Sales in accordance with Section 4.3 shall include the calculations for subclauses (1), (2) and (3) above and GMI shall have the right to audit such calculations as set forth in Section 4.4.

Net Sales shall be determined from the books and records maintained in accordance with GAAP, as consistently applied by Pfizer. The calculation of Net Sales will involve the use of estimates for certain deductions above. Those estimates will be accrued and Net Sales trued-up at least quarterly to actual in accordance with GAAP and Pfizer’s internal accounting policies, as consistently applied.

1.42 “Ongoing Clinical Trial” means the Phase II Clinical Trial being performed by GMI with respect to GMI-1070 under Protocol GMI-1070-201.

1.43 “Other Active Compound” means a therapeutically active compound that is not a Compound.

1.44 “Party” means GMI or Pfizer and collectively the “Parties”.

1.45 “Patent Rights” means United States and foreign counterpart patents, patent applications, provisional patent applications, certificates of invention, applications for certificates of invention, divisions, continuations, continuations-in-part, non-provisional patent applications

claiming priority benefit of a provisional application, continued prosecution applications, national and regional stage counterparts, together with any patent term extensions, registrations, confirmations, reissues, re-examinations or renewals and supplemental examinations of the foregoing as well as supplementary protection certificates or the equivalent thereof, and any other form of government-issued patent protection directed to the inventions claimed in the foregoing.

1.46 "Person" means an individual, sole proprietorship, partnership, limited partnership, limited liability partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture or other similar entity or organization, including a government or political subdivision, department or agency of a government.

1.47 "Pfizer Excluded Patent Rights" means Patent Rights owned by or licensed to Pfizer or its Affiliates that cover an Other Active Compound and/or manufacture or use thereof independent of a Compound.

1.48 "Pfizer Indemnitees" has the meaning set forth in Section 8.2.

1.49 "Pfizer Know-How" means Know-How owned by or licensed to Pfizer or its Affiliates (with the right to grant sublicenses) as of the date of termination covered by Section 9.5 which (a) constitute improvements to Compound or Licensed Product or the manufacture or use thereof, where such improvements were created or made in the course of activities carried out pursuant to the licenses granted to Pfizer in Section 2.1, or (b) Pfizer had actually applied or used with respect to a Compound or Licensed Product prior to any termination of this Agreement, provided that such Know-How is necessary or useful for the continued research, development, manufacture or commercialization of such Compound or Licensed Product in the Reference Forms, or (ii) Pfizer had, prior to any termination of this Agreement, incorporated into such Compound or Licensed Product in the Reference Forms as of the time of such termination.

1.50 "Pfizer Patent Rights" means Patent Rights owned by Pfizer or its Affiliates or licensed to Pfizer or its Affiliates (with the right to grant sublicenses) that are not Pfizer Excluded Patent Rights, in each case as of the date of termination covered by Section 9.5 of this Agreement and in each case to the extent such Patent Rights (a) cover improvements to a

Compound or the manufacture or use thereof and/or improvements to a Licensed Product and/or the manufacture or use thereof, in each case described in this clause (a) where such improvement was created or made in the course of activities carried out pursuant to the licenses granted to Pfizer in Section 2.1, or (b) cover a product, composition or process that (i) Pfizer had actually applied or used with respect to a Compound or Licensed Product prior to any termination of this Agreement, provided that such a product, composition or process is necessary or useful for the continued research, development, manufacture or commercialization of such Compound or Licensed Product in the Reference Forms as of the time of such termination, or (ii) Pfizer had, prior to any termination of this Agreement, incorporated into such Compound or Licensed Product in the Reference Forms as of the time of such termination.

1.51 "Pfizer Quarter" means (i) in the United States, each of the four (4) thirteen (13) week periods as used by Pfizer in its audited financial reports, the first commencing on January 1 of any year, and (ii) in any country in the Territory other than the United States, each of the four (4) thirteen (13) week periods as used by Pfizer in its audited financial reports, the first commencing on December 1 of any year. With respect to Net Sales, the Net Sales for a Pfizer Quarter is the aggregate of Net Sales in the United States and outside the United States for the applicable Pfizer Quarter.

1.52 "Pfizer Year" means the twelve (12) month period (i) with respect to the United States, commencing on January 1st of any calendar year and (ii) with respect to any country in the Territory other than the United States, commencing on December 1st of any calendar year.

1.53 "Phase II Clinical Trial" means for the purpose of obtaining Regulatory Approval a study in humans of the safety, dose range and efficacy of a Product that is prospectively designed to generate sufficient data to commence a Phase III Clinical Trial that would satisfy the requirements of 21 C.F.R. 312.21(b), or the equivalent process in other countries or groups of countries of the Territory.

1.54 "Phase III Clinical Trial" means a controlled study in humans of the efficacy and safety of a Product that is prospectively designed to demonstrate statistically whether such Product is effective and safe for use in a particular indication in a manner sufficient to obtain Regulatory Approval to market such Product that would satisfy the requirements of 21 C.F.R. 312.21(c), or the equivalent process in other countries or groups of countries of the Territory.

1.55 “Phase III Milestone Advance” has the meaning set forth in Section 4.1(c).

1.56 “Pricing Approval” means, in any country where a Governmental Authority authorizes reimbursement for, or approves or determines pricing for, pharmaceutical products, receipt (or, if required to make such authorization, approval or determination effective, publication) of such reimbursement authorization or pricing approval or determination (as the case may be).

1.57 “Product Infringement” has the meaning set forth in Section 5.2(b).

1.58 “Reference Form” means a Compound or Licensed Product (i) in the form being sold by Pfizer at the time of termination of this Agreement covered by Section 9.5, and/or (ii) in the form used in any ongoing clinical trial at the time of termination of this Agreement covered by Section 9.5 and/or (iii) in the form used in a clinical trial completed by Pfizer at the time of termination of this Agreement covered by Section 9.5.

1.59 “Regulatory Approval(s)” means any and all approvals, with respect to any jurisdiction, or authorizations (other than Pricing Approvals) of a Regulatory Authority, that are necessary for the commercial manufacture, distribution, use, marketing or sale of a pharmaceutical product in such jurisdiction.

1.60 “Regulatory Authority” means, in respect of a particular country or jurisdiction, the Governmental Authority having responsibility for granting Regulatory Approvals in such country or jurisdiction, including in the United States the FDA, and any successor governmental authority having substantially the same function.

1.61 “Second Indication” means any indication other than the First Indication.

1.62 “Sickle Cell Disease” means sickle cell disease or sickle cell anemia, a chronic anemia marked by sickle-shaped red blood cells occurring in individuals who are homozygous for a mutant hemoglobin gene.

1.63 “Sublicensee” means any person or entity that is granted a sublicense by Pfizer under the license granted to Pfizer pursuant to this Agreement.

1.64 “Term” has the meaning set forth in Section 9.1.

1.65 “Territory” means the entire world.

1.66 “Third Party” means any entity other than GMI or Pfizer and any respective Affiliates.

1.67 “Third Party Claim” has the meaning set forth in Section 8.4.

1.68 “Third Party Royalty” has the meaning set forth in Section 4.2(c).

1.69 “Topline Study Report” means a summary of results, including data tables, with respect to the Ongoing Clinical Trial, in the form attached in Schedule 1.69.

1.70 “Transition Plan” has the meaning set forth in Section 2.3.

1.71 “United States” or “U.S.” means the United States of America and its territories and possessions.

1.72 “Valid Claim” “ means, with respect to a particular country, an issued claim of an unexpired granted patent which claim (i) has not been cancelled, withdrawn, abandoned, or disclaimed, and (ii) has not been permanently revoked, held invalid or unenforceable by a decision of a court of competent jurisdiction or administrative agency in an unappealed or unappealable decision in the subject country, and (iii) has not been admitted to be invalid or unenforceable through reissue or otherwise.

1.73 “Withholding Party” has the meaning set forth in Section 4.5.

Article 2 LICENSES

2.1 Exclusive License. Subject to the terms of this Agreement, GMI hereby grants to Pfizer an exclusive license or sublicense (even as to GMI), as the case may be, with the right to grant sublicenses pursuant to Section 2.2, under GMI Patent Rights and GMI Know-How to research, develop, make, have made, use, sell, offer to sell, supply, cause to be supplied, import and have imported Licensed Product in the Field in the Territory. GMI covenants and agrees that neither GMI nor its Affiliates will practice, use or exploit GMI Patent Rights and/or GMI Know-How with respect to Compound, except in performing and completing the Ongoing Clinical Trial and for carrying out or allowing Third Parties to carry out the studies described in Schedule 2.1.

2.2 Right to Sublicense. Within its sole discretion, Pfizer may grant exclusive or non-exclusive sublicenses under any of the rights and licenses granted to Pfizer under Section 2.1 of this Agreement subject to the following conditions: (i) each sublicense shall be subject to and consistent with the rights and licenses granted under this Agreement; (ii) each sublicense shall include an obligation of the Sublicensee to account for and report its sales of Licensed Products to Pfizer on the same basis as if such sales were Net Sales by Pfizer; and (iii) each sublicense shall require the Sublicensee to be bound by the terms and conditions of this Agreement (other than payment provisions for which Pfizer is responsible) as if the Sublicensee was a signatory to this Agreement. Pfizer shall provide GMI with prompt written notice that a sublicense has been granted or terminated. The name of the Sublicensee and a copy of the sublicense agreement and any amendments thereto, which agreements and amendments shall be redacted as to any financial and other proprietary information, shall be furnished by Pfizer to GMI within thirty (30) days after the execution thereof. Pfizer shall cause a Sublicensee to comply with the terms and conditions of this Agreement and Pfizer shall be liable to GMI for any breach of such terms and conditions by any Sublicensee.

2.3 Disclosure of Technology.

(a) GMI shall provide to Pfizer the GMI Know-How and a copy of filings, minutes and correspondence with a Regulatory Authority in its possession that may be necessary or useful to Pfizer to develop, manufacture, register, or market Licensed Products and efficiently practice the licenses granted under this Agreement within sixty (60) days of the Effective Date and thereafter (to the extent not previously disclosed and provided) no later than twenty (20) Business Days after such additional GMI Know-How becomes known or is acquired and a copy of filings, minutes and correspondence with a Regulatory Authority no later than twenty (20) Business Days after made, and after Completion of the Ongoing Clinical Trial, GMI shall transfer to Pfizer (i) within ten (10) Business Days after database lock for the Ongoing Clinical Trial all INDs and other filings, minutes and correspondence with a Regulatory Authority, and (ii) within a reasonable period of time after Completion of the Ongoing Clinical Trial, but in any event within ten (10) Business Days after receiving such information from the relevant service providers, any safety or pharmacovigilance databases, in each case, with respect to Licensed Product in the Territory. GMI shall bear its costs and expense for providing to Pfizer all of the information described above in this Section 2.3.

(b) In order to ensure the smooth transition of such GMI Know-How and development activities to Pfizer for the Compounds and Licensed Products that GMI has licensed to Pfizer pursuant to Section 2.1, each Party shall, at its own cost and expense (except as expressly set forth in the Schedule 2.3), carry out the activities to be performed by it as set forth in the transition plan attached hereto as Schedule 2.3 (the "Transition Plan"). If there is an inconsistency or disagreement between the Transition Plan and this Agreement, the terms of this Agreement shall prevail. Neither this Agreement nor the licenses granted hereunder shall be construed to confer any rights or licenses to Pfizer by implication, estoppel or otherwise as to any data, Know-How or Patent Rights other than GMI Patent Rights and GMI Know-How in accordance with the licenses granted under this Agreement.

(c) In addition to providing the information described in Section 2.3(a) and the transition services described in Section 2.3(b), at the request of Pfizer, GMI shall provide Pfizer with reasonable technical assistance with respect to understanding and implementing the GMI Know-How and filings, minutes and correspondence with a Regulatory Authority provided to Pfizer under the foregoing provisions of this Section 2.3; provided, however, that in providing assistance under this Section 2.3(c), GMI shall provide [* * *] of meetings between the appropriate GMI representatives and Pfizer representatives and an additional [* * *] of GMI representatives at no cost to Pfizer, and Pfizer shall pay GMI on a person-hour basis for any additional assistance under this Section 2.3(c) at a rate and for a number of hours that will be agreed upon in advance between GMI and Pfizer.

2.4 Reciprocal Non-Exclusive Research License for Disclosed Know-How and Confidential Information. Subject to the terms and conditions of this Agreement and any preexisting exclusive license grants to Third Parties, and without limiting any other license granted to either Party under this Agreement:

(a) GMI hereby grants to Pfizer a non-exclusive, irrevocable, perpetual, royalty-free, fully paid-up, worldwide license, with the right to sublicense to Pfizer Affiliates, to use only for research purposes any and all GMI Know-How or Confidential Information of GMI disclosed to Pfizer during the Term but not any GMI Patent Rights, it being understood and agreed that neither Pfizer nor any of its Affiliates will have any right or license under this Section 2.4 to use any such GMI Know-How or GMI Confidential Information with respect to Compound or Licensed Product after termination of this Agreement and/or in connection with obtaining Regulatory Approval of a pharmaceutical product and/or the sale or manufacture for sale of any pharmaceutical product.

(b) Pfizer hereby grants to GMI a non-exclusive, irrevocable, perpetual, royalty-free, fully paid-up, worldwide license, with the right to sublicense to GMI Affiliates, to use only for research purposes any and all Pfizer Know-How or Confidential Information of Pfizer disclosed to GMI during the Term (but not any Pfizer Patent Rights), it being understood and agreed that neither GMI nor any of its Affiliates will have any right or license under this Section 2.4 to use any such Pfizer Know-How or Pfizer Confidential Information in connection with obtaining Regulatory Approval of a pharmaceutical product and/or the sale or manufacture for sale of any pharmaceutical product.

Article 3 DEVELOPMENT, REGULATORY AND COMMERCIALIZATION

3.1 Completion of the Ongoing Clinical Trial.

(a) Supervision and Control.

(i) Subject to subsections (ii) and Section 3.1(b) and 3.1(c), GMI shall complete the Ongoing Clinical Trial as soon as reasonably practicable after the Effective Date at the cost and expense of GMI and under the supervision and control of the JDT (as defined below); *provided*, that such supervision and control of the JDT is in accordance with applicable Laws and is in conformance with GMI's obligations under any agreements with a Third Party that exist as of the Effective Date.

(ii) Notwithstanding Section 3.1(a)(i), GMI shall not be required to continue the Ongoing Clinical Trial in the event that GMI reasonably believes that continuing the Ongoing Clinical Trial raises concerns about patient safety and/or would be in violation of any applicable Law; *provided*, that GMI shall promptly notify Pfizer in writing of any such decision to discontinue the Ongoing Clinical Trial and Pfizer shall be required to provide its written consent for such discontinuation, which consent shall not be unreasonably withheld.

(b) Joint Development Team.

(i) Purpose. Within thirty (30) days after the Effective Date, the Parties shall establish a Joint Development Team ("JDT") for the purpose of supervising and controlling the Ongoing Clinical Trial, including but not limited to (i) reviewing and approving all development, regulatory and pharmaceutical sciences plans and all material changes thereto, (ii) reviewing and approving the scientific integrity, statistical analysis plans and protocols of the Ongoing Clinical Trial and (iv) reviewing and discussing data and results, including with respect to safety issues, of the Ongoing Clinical Trial. The JDT shall be composed of six (6) members (or such other number as mutually agreed in writing by the Parties) with three (3) members designated by each Party in writing to the other Party, who each are employees or contracted consultants of their respective Parties and have the appropriate expertise and authority to participate in the activities and decision-making of the JDT. The JDT shall appoint a chairperson from among its members, which shall be one of the representatives of Pfizer. The chairperson shall be responsible for calling meetings of the JDT and for leading the meetings. The JDT shall not have the power to make any amendments or modifications to this Agreement. The JDT shall be disbanded upon the Completion of the Ongoing Clinical Trial.

(ii) Meetings and Information Requests. The JDT shall meet within twenty (20) Business Days after the Effective Date and, thereafter, once each month or more frequently if requested by the chairperson in writing. A quorum for the conduct of

business at any meeting of the JDT shall consist of one representative of Pfizer and one representative of GMI. Each of Pfizer and GMI, shall have one vote, and subject to clause (iii) below, all decisions shall be reached by a unanimous vote. If a JDT member, including the Chairperson, cannot attend a JDT meeting, such member may send a designate who is authorized to make decisions on behalf of the respective Party, and such designate shall be permitted to participate fully in such JDT meeting, including casting any required vote. Upon prior written notice, each Party may invite additional employees of such Party to attend any JDT meeting to the extent that such Party believes that attendance by one or more additional employees is necessary or desirable to fulfill the purpose of the JDT. The location of meetings of the JDT shall alternate between Pfizer's and GMI's principal place of business, or shall be conducted by telephone and/or video conferencing as agreed by the Parties. Each Party shall bear its own expenses related to the attendance at JDT meetings.

In the event that Pfizer requests additional information from GMI with respect to the Ongoing Clinical Trial that is in the possession or control of GMI (including information controlled by GMI but in the possession of a Third Party), GMI shall provide such information to Pfizer and to the extent reasonably possible such information shall be provided within three (3) Business Days of such request, provided, however, that GMI shall promptly provide Pfizer with any information with respect to any safety issues.

(iii) Decision-Making. In the event that there is a tie vote that is not resolved by the Parties within ten (10) days after the tie vote, then the vote shall be resolved by Pfizer.

(iv) Minutes. The JDT shall keep accurate minutes of its deliberations which shall record all proposed decisions and all actions recommended or taken. A member of the JDT shall serve as secretary and the Parties shall alternate responsibility for the preparation of the draft minutes on a calendar quarter basis. Draft minutes shall be sent to all members of the JDT within fifteen (15) days after each meeting and shall be approved, if appropriate, or amended and approved as amended within thirty (30) days by a quorum of the JDT. All records of the JDT shall at all times be available to both Pfizer and GMI.

(c) Costs for Completion of the Ongoing Clinical Trial.

A. The budget for the costs for Completion of the Ongoing Clinical Trial after the Effective Date is set forth in Schedule 3.1(c). In the event that GMI anticipates that the costs for Completion of the Ongoing Clinical Trial after the Effective Date is reasonably likely to exceed [* * *] Dollars ($[* * *]), GMI shall promptly notify the JDT. If GMI anticipates that total costs will exceed [* * *] Dollars ($[* * *]), GMI shall promptly submit to the JDT for approval a new budget for such costs, together with a detailed explanation of the estimated excess costs. Such new budget must be approved by the JDT prior to the incurrence of any costs in excess of [* * *] Dollars ($[* * *]). GMI shall be responsible for the costs for Completion of the Ongoing Clinical Trial after the Effective Date, provided that the total costs payable by GMI after the Effective Date for Completion of the Ongoing Clinical Trial shall not exceed [* * *] Dollars ($[* * *]). Notwithstanding anything else to the contrary, GMI shall have the right to suspend any and all work with respect to the Ongoing Clinical Trial to the extent that the cost thereof after the Effective Date exceeds [* * *] Dollars ($[* * *]) until the JDT approves a revised budget for the costs of Completion of the Ongoing Clinical Trial as set forth above (such excess costs, the "Additional Ongoing Clinical Trial Costs"). On an ongoing basis, and no more than [* * *], Pfizer shall reimburse GMI [* * *] such Additional Ongoing Trial Costs and payment shall be due from Pfizer within [* * *] after receipt of an invoice and an explanation of the Additional Ongoing Clinical Trial Costs included in the invoice.

B. In the event that the Additional Ongoing Clinical Trial Costs due and payable by Pfizer hereunder exceed $[* * *], Pfizer shall have the right, after Completion of the Ongoing Clinical Trial, to engage an independent certified public accounting firm selected by Pfizer and reasonably acceptable to GMI, at Pfizer's expense, except as set forth below, and upon at least forty-five (45) days prior written notice and no later than [* * *] after Completion of the Ongoing Clinical Trial, to have access during normal business hours to such of the records of GMI as may be reasonably necessary to verify the accuracy of the Additional Ongoing Clinical Trial Costs paid by Pfizer hereunder. The accounting firm shall disclose to Pfizer and GMI only whether the Additional Ongoing Clinical Trial Costs are correct or incorrect and the amount of any discrepancy. If such accounting firm identifies an overpayment of such Additional Ongoing Clinical Trial Costs, GMI shall reimburse to Pfizer the amount of the overpayment within thirty (30) days of the date Pfizer delivers to GMI such accounting firm's written report so concluding. The fees charged by such accounting firm shall be paid by Pfizer unless the overpayment exceeded [* * *] percent ([* * *]%) of the amount invoiced by GMI with respect to the Additional Ongoing Clinical Trial Costs, in which case, GMI shall pay to Pfizer the fees and costs charged by such accounting firm.

3.2 Development Activities, Regulatory Approval and Commercialization After the Completion of the Ongoing Clinical Trial.

(a) Diligence. After Completion of the Ongoing Clinical Trial, Pfizer agrees to use Commercially Reasonable Efforts to, at its expense, develop, obtain Regulatory Approval for commercialization and continue to commercialize a Licensed Product for the First Indication in the United States. Pfizer shall notify GMI in writing promptly of any decision to cease development activities, efforts to obtain Regulatory Approval, or commercialization of the Licensed Product for the First Indication in the United States and the Major Countries of Europe.

(b) Development Activities and Regulatory Affairs.

(i) Development Activities.

(A) As between GMI and Pfizer, Pfizer shall have the exclusive right and responsibility, at Pfizer's own expense, to develop any Compounds and Licensed Products after Completion of the Ongoing Clinical Trial. As between GMI and Pfizer, all decisions with respect to development activities for any Compounds and Licensed Products after Completion of the Ongoing Clinical Trial shall be made by Pfizer.

(B) Without limiting the foregoing, after the Completion of the Ongoing Clinical Trial, as between GMI and Pfizer, Pfizer shall have the sole right to determine whether Pfizer or a Regulatory Authority requires an additional Phase II Clinical Trial (an "Additional Phase II Clinical Trial") for Licensed Products with respect to the First Indication, and if such determination is made, to initiate and complete such Additional Phase II Clinical Trial.

(ii) Regulatory Affairs.

(A) As between GMI and Pfizer, Pfizer shall have the sole right, at Pfizer's own expense, to determine all regulatory plans and strategies for the Licensed Products, and will own and be responsible for preparing, seeking, submitting and maintaining all regulatory filings and Regulatory Approvals for all Licensed Products, including but not limited to, (A) preparing all reports necessary as part of a regulatory filing or Regulatory Approval, (B) having the sole right to determine whether to file for Regulatory Approval in any country in the Territory, and (C) obtaining Regulatory Approval in any country in the Territory.

(B) As between GMI and Pfizer, Pfizer shall have the sole right to apply for and secure exclusivity rights that may be available under the Law of countries in the Territory, including any data or market exclusivity periods such as those periods listed in the FDA's Orange Book or periods under national implementations of Article 10.1(a)(iii) of Directive 2001/EC/83 (including any pediatric exclusivity extensions or other forms of regulatory exclusivity that may be available), and all international equivalents. GMI shall reasonably cooperate with Pfizer and take such reasonable actions to assist Pfizer, in obtaining such exclusivity rights in each country, as Pfizer may reasonably request from time to time.

(iii) Joint Steering Committee.

(A) Purpose. Within thirty (30) days after the Completion of the Ongoing Clinical Trial, the Parties shall establish a Joint Steering Committee ("JSC") for the purpose of exchanging information and reporting on the progress of the development of Licensed Product including but not limited to, clinical trials, as well as regulatory, manufacturing, safety and efficacy issues and, at the relevant time, discussing at a high level Pfizer's plans for the initial launch of the Licensed Product (provided that in no event shall Pfizer be obligated to provide detailed commercialization plans or sensitive commercial information except as set forth in Section 4.3 or 4.4). For the avoidance of doubt, the JSC shall be a non-voting entity and no votes or decisions shall be made by its members. The JSC shall be composed of at least two (2) members (or such other number as mutually agreed in writing by the Parties) designated by each Party in writing to the other Party, who each are employees or contracted consultants of their respective Parties and have the appropriate expertise and authority to participate in the activities. The JSC shall appoint a chairperson from among its members, which shall

be one of the representatives of Pfizer. The chairperson shall be responsible for calling meetings of the JSC and for leading the meetings. At each meeting of the JSC, Pfizer will provide the JSC with updates as to plans for researching and developing Licensed Product and including an update on work performed with respect to Licensed Product during the previous calendar quarter. The JSC shall not have the power to make any amendments or modifications to this Agreement. The JSC shall be disbanded upon the earlier of (i) Regulatory Approval by the FDA of a Licensed Product for the First Indication in the United States or (ii) a Change of Control of GMI or (iii) upon prior written notice by GMI to Pfizer.

(B) Meetings. The JSC shall meet within forty-five (45) days after the Completion of the Ongoing Clinical Trial and, thereafter, at least every six (6) months or more frequently if requested by the chairperson in writing. Each Party shall have at least one designated representative in attendance at any JSC meeting and each Party may invite additional employees of such Party to attend any JSC meeting to the extent that such Party believes that attendance by one or more additional employees is necessary or desirable to fulfill the purpose of the JSC. If a JSC member cannot attend a JSC meeting, such member may send a designate, and such designate shall be permitted to participate fully in such JSC meeting. The location of meetings of the JSC shall alternate between Pfizer's and GMI's principal place of business, or shall be conducted by telephone and/or video conferencing as agreed by the Parties. Each Party shall bear its own expenses related to the attendance at JSC meetings.

(C) Minutes. The JSC shall keep accurate minutes of its discussions held at each meeting. A JSC member of Pfizer shall serve as secretary of JSC meetings. The secretary of the meeting shall prepare and distribute to all members of the JSC minutes of the meeting within thirty (30) days after each meeting and shall be approved, or revised and approved at the next JSC meeting. All records of the JSC shall at times be available to both Pfizer and GMI.

(iv) Pfizer Reports. Following such time as the JSC is disbanded, Pfizer shall provide GMI with a written report summarizing in reasonable detail the development and/or regulatory activities performed by Pfizer and its Affiliates and Sublicensees as to research and development of a Licensed Product for each [* * *], within [* * *] days after the end of each [* * *]. Such report shall be provided by Pfizer to GMI through, and with respect to, the first calendar year after the First Commercial Sale in the United States. Thereafter upon GMI's request no more frequently than [* * *], Pfizer shall provide to GMI and update with respect to any ongoing or planned clinical trials of any Licensed Product (including clinical trials for any new indications) undertaken by or on behalf of Pfizer or any of its Affiliates and any pending or planned applications for Regulatory Approval for the Licensed Product by or on behalf of Pfizer or any of its Affiliates (including applications with respect to any new indications for the Licensed Product).

(c) Commercialization/Pricing.

(i) General. Pfizer shall be solely responsible for, at Pfizer's expense, marketing, promoting, selling, distributing and determining pricing and other terms of sale for all Licensed Products.

(ii) Trademarks. The Licensed Products shall be sold under a trademark, and marketed using logos, trade dress and domain names selected and owned by Pfizer. Applications for all such product trademarks shall be filed, registered, maintained and prosecuted by Pfizer, at Pfizer's expense.

(d) Manufacture and Supply. Pfizer shall be responsible for the manufacture and supply of (i) clinical materials for an Additional Phase II Clinical Trial initiated after the Completion of the Ongoing Clinical Trial and any Phase III Clinical Trial for each Licensed Product and (ii) for the commercial supply of each Compound and each Licensed Product in the Territory.

Article 4 PAYMENTS BY PFIZER TO GMI

4.1 Milestone Payments.

(a) Effective Date Payment. In partial consideration for the expenses incurred by GMI in research and development of Licensed Product prior to the Effective Date, Pfizer shall pay GMI twenty-two million five-hundred thousand dollars ($22,500,000) within fifteen (15) days after the Effective Date, which payment shall be non-refundable and non-creditable.

(b) Event Milestones. Pfizer shall pay to GMI the following non-creditable, except as set forth in this Agreement, non-refundable amounts within forty-five (45) days of the first occurrence and only the first occurrence of the following events in connection with a Licensed Product that is achieved by Pfizer or its Affiliate or Sublicensee:

(i) With respect to [* * *]:

(A)	Subject to [* * *], initiation of dosing of a first patient in a first Phase III Clinical Trial for the First Indication	$35,000,000
(B)	Acceptance of filing for Regulatory Approval by the FDA for the First Indication	$[* * *]
(C)	First Commercial Sale in the United States for the First Indication	$[* * *]
(D)	Acceptance of filing for Regulatory Approval by the EMA for the First Indication	$[* * *]
(E)	First Commercial Sale in a Major Country of Europe for the First Indication	$[* * *]

(ii) With respect to a Second Indication:

(A)	Initiation of dosing of a first patient in a first Phase III Clinical Trial for a Second Indication	$[* * *]
(B)	Acceptance of filing for Regulatory Approval by the FDA for a Second Indication	$[* * *]
(C)	First Commercial Sale in the United States for a Second Indication	$[* * *]
(D)	Acceptance of filing for Regulatory Approval by the EMA for a Second Indication	$[* * *]
(E)	First Commercial Sale in a Major Country of Europe for a Second Indication	$[* * *]

(iii) With respect to Net Sales of Licensed Products:

(A)	The first time that total Net Sales of Licensed Products in the Territory in a Pfizer Year are greater than [* * *] Dollars ($[* * *])	$[* * *]
(B)	The first time that total Net Sales of Licensed Products in the Territory in a Pfizer Year are greater than [* * *] Dollars ($[* * *])	$[* * *]
(C)	The first time that total Net Sales of Licensed Products in the Territory in a Pfizer Year are greater than [* * *] Dollars ($[* * *])	$[* * *]

(c) Phase III Milestone Advance. In the event that a Phase III Clinical Trial with respect to a Licensed Product for the First Indication has not been commenced by Pfizer within twelve (12) months after Completion of the Ongoing Clinical Trial, Pfizer will make an advance payment to GMI of fifteen million dollars ($15,000,000) (the "Phase III Milestone Advance") against the milestone set forth in Section 4.1(b)(i)(A) with respect to the initiation of a Phase III Clinical Trial for the First Indication; *provided*, that, the Phase III Milestone Advance will not be payable if [* * *]; *provided further* that, if the Phase III Milestone Advance is made, the remainder of the milestone payment set forth in Section 4.1(b)(i)(A), such remaining amount being twenty million dollars ($20,000,000), shall be payable to GMI by Pfizer within forty-five (45) days of the initiation of dosing of a first patient in a first Phase III Clinical Trial for a First Indication. The Phase III Milestone Advance shall be payable by Pfizer to GMI within forty-five (45) days after the end of such twelve (12) month period if Pfizer has not provided written notice to GMI of a [* * *] or [* * *], if [* * *]. The payment to GMI under this Section 4.1(c) shall be non-refundable and shall be creditable only against the milestone payment set forth in Section 4.1(b)(i)(A).

4.2 Royalties.

(a) Royalty Payments. Subject to Sections 4.2(b), (c), and (e), during the Term, Pfizer shall pay to GMI within forty-five (45) days of the end of each calendar quarter royalties on Net Sales of Licensed Products sold in the corresponding Pfizer Quarter during the Term in the amounts set forth below, which shall be non-creditable and non-refundable:

(i) Portion of aggregate Net Sales of Licensed Products in all countries of the Territory in a Pfizer Year up to and including $[* * *]; and [* * *]

(ii) Portion of aggregate Net Sales of Licensed Products in all countries of the Territory in a Pfizer Year above $[* * *] up to and including $[* * *]; and [* * *]

(iii) Portion of aggregate Net Sales of Licensed Products in all countries of the Territory in a Pfizer Year above $[* * *]. [* * *]

(b) Royalty Period. On a country-by-country and Licensed Product-by-Licensed Product basis, royalties on each Licensed Product under Section 4.2(a) in each country shall terminate on the tenth (10th) anniversary of the First Commercial Sale of such Licensed Product in such country, after which time there is no further royalty obligation with respect to such Licensed Product in such country, except that the royalty shall continue after such tenth (10th) anniversary in such country with respect to such Licensed Product sold in such country where in the country where sold or manufactured such Licensed Product is covered by a Valid Claim of a GMI Patent Right. The termination of royalty payments under this Section 4.2(b) in a country for a Licensed Product shall not terminate the licenses granted to Pfizer in such country.

(c) Third Party Royalties Payable by Pfizer. Subject to clause (d) below, at any time after the Effective Date, in the event that Pfizer or its Affiliates pays royalties to a Third Party during a Pfizer Quarter for Licensed Product in a country for which royalties are also payable to GMI under this Agreement in such Pfizer Quarter for sales in such country, and such royalties are due to such Third Party as a result of a Valid Claim of Patent Rights of such Third Party that claims a Compound or use thereof (a "Third Party Royalty"), then [* * *] percent ([* * *]%) of such Third Party Royalty paid by Pfizer or its Affiliates for sale of such Licensed Product for such Pfizer Quarter in such country may be deducted against [* * *] percent ([* * *]%) of any royalty payments calculated under Section 4.2(a) with respect to the sale of such Licensed Product in such country for such Pfizer Quarter.

(d) Third Party Royalties Payable by GMI. GMI shall be solely responsible for making any and all payments that are due and payable with respect to a Licensed Product under a license agreement between GMI and a Third Party that is in effect as of the Effective Date.

(e) Generic Products. In the event that a Generic Product is sold in a country of the Territory in a Pfizer Quarter that in such country or in the country where manufactured is not covered by a Valid Claim of a GMI Patent Right, then the royalties payable by Pfizer under Section 4.2(a) in such country for the corresponding Licensed Product shall be reduced in the applicable Pfizer Quarter by [* * *] percent ([* * *]%); provided, however that if in the applicable Pfizer Quarter in the applicable country there is a royalty reduction taken under

Section 4.2(c), then the royalty reduction under this Section 4.2(e) shall be calculated before the royalty reduction under Section 4.2(c) and in no event shall the royalty reductions under this Section 4.2(e) and under Section 4.2(c) reduce the royalty on the applicable Licensed Product in the applicable country in the applicable Pfizer Quarter to less than [* * *] percent ([* * *]%) of Net Sales.

(f) Currency. All payments required under this Article 4 shall be made in U.S. Dollars. For the purpose of computing the Net Sales of Licensed Products sold in a currency other than U.S. Dollars, such currency shall be converted from local currency to U.S. Dollars in a manner consistent with Pfizer's normal practices used to prepare its audited financial statements for external reporting purposes; *provided*, that such practices use a widely accepted source of published exchange rates.

(g) Transfers to Affiliates. No royalties shall be due upon the sale or other transfer of Licensed Product among Pfizer and its Affiliates for resale, or upon the sale or other transfer to a Sublicensee for resale, but in such cases the royalty shall be due and calculated upon Pfizer's or its Affiliates or Sublicensees Net Sales to a Third Party.

4.3 Royalty Reports and Payments. During the Term, following the First Commercial Sale of a Licensed Product in a country of the Territory, Pfizer shall furnish to GMI a quarterly written report for each Pfizer Quarter showing for the applicable Pfizer Quarter the gross sales, Net Sales and calculation thereof that breaks-out the applicable deductions permitted in calculating Net Sales on a Licensed Product-by-Licensed Product and country-by-country basis for all Licensed Products during the applicable Pfizer Quarter, applicable royalty deductions for such Licensed Products, for the applicable Pfizer Quarter, the manner in which conversion to U.S. Dollars was calculated and the royalties payable under this Agreement for Licensed Products. Reports shall be due on the forty-fifth (45th) day following the close of each calendar quarter. Royalties shown to have accrued by each royalty report shall be due and payable on the date such royalty report is due; *provided* if Net Sales in any Pfizer Quarter during a given Pfizer Year are less than zero as a result of permitted reductions in calculating Net Sales under this Agreement, then Pfizer will not be obligated to pay GMI any royalties for such Pfizer Quarter, and for purposes of calculating royalty payments with respect to the fourth Pfizer Quarter of such

Pfizer Year, Net Sales for such fourth Pfizer Quarter shall be reduced by the aggregate amount of negative Net Sales in each Pfizer Quarter in which Net Sales are less than zero during the applicable Pfizer Year that have not been previously deducted from Net Sales. If, as a result of such reduction, the aggregate Net Sales with respect to such fourth Pfizer Quarter are less than zero, then, for purposes of calculating royalty payments with respect to the first Pfizer Quarter of the next succeeding Pfizer Year, Net Sales for such first Pfizer Quarter shall be reduced by the amount of negative Net Sales in the fourth Pfizer Quarter of the immediately preceding Pfizer Year. Any adjustment for negative Net Sales described in this Section 4.3 shall be clearly indicated and shown in the applicable royalty reports provided by Pfizer pursuant to this Section 4.3.

4.4 Royalty Reviews.

(a) Access and Review. Upon the written request of GMI and not more than once in each calendar year, and upon at least forty-five (45) days prior written notice, Pfizer shall permit an independent certified public accounting firm selected by GMI and reasonably acceptable to Pfizer, at GMI's expense, to have access during normal business hours to such of the records of Pfizer as may be reasonably necessary to verify the accuracy of the royalty reports and payments hereunder for any or all of the twelve (12) Pfizer Quarters preceding the Pfizer Quarter in which the request is made. The accounting firm shall disclose to GMI and Pfizer only whether the royalty reports, are correct or incorrect and the amount of any discrepancy. No other information shall be provided to GMI. GMI shall provide Pfizer with a copy of such report within thirty (30) days after receipt thereof.

(b) Underpayments and Overpayments. If such accounting firm identifies an underpayment of royalties during such period, Pfizer shall pay GMI the amount of the underpayment within thirty (30) days of the date GMI delivers to Pfizer such accounting firm's written report so concluding. The fees charged by such accounting firm shall be paid by GMI unless the underpayment exceeded [* * *] percent ([* * *]%) of the amount owed by Pfizer to GMI for the period audited, in which case, Pfizer shall pay to GMI the fees and costs charged by such accounting firm. If the examination shows an overpayment of royalties by Pfizer, such amount shall be fully creditable against future royalty payments.

(c) Sublicensee Requirements. Pfizer shall include in each sublicense granted by it pursuant to this Agreement a provision requiring the Sublicensee to make reports to Pfizer, to keep and maintain records of Net Sales made pursuant to such sublicense and to grant access to such records by GMI's independent accountant to the same extent required of Pfizer under this Agreement.

4.5 Withholding. GMI alone shall be responsible for paying any and all taxes (other than withholding taxes required to be paid by Pfizer) levied on account of, or measured in whole or in part by reference to, any payments made by Pfizer to GMI under this Agreement. If provision is made in law or regulation of any country of the Territory for withholding of taxes of any type, levies or other charges with respect to any amounts payable hereunder to GMI, Pfizer ("Withholding Party") shall promptly pay such tax, levy or charge for and on behalf of GMI to the proper governmental authority, and shall promptly furnish GMI with a receipt for such payment. The Withholding Party shall have the right to deduct any such tax, levy or charge actually paid from payment due GMI or be promptly reimbursed by GMI if no further payments are due the Withholding Party. The Withholding Party agrees to assist GMI in claiming exemption from such deductions or withholdings under double taxation or similar agreement or treaty from time to time in force and in minimizing the amount required to be so withheld or deducted. The Withholding Party shall apply the reduced rate of withholding, or dispense with withholding, as the case may be, provided that the Withholding Party has received evidence, in a form satisfactory to the Withholding Party, of GMI's delivery of all applicable forms (and, if necessary, its receipt of appropriate governmental authorization) at least fifteen (15) days prior to the time that the payment is due. The preceding shall apply mutatis mutandis in the event that any payments shall be made to Pfizer from GMI.

4.6 Interest for Late Payment. All payments under this Agreement shall bear interest from the fifteenth (15th) day after the date due until paid at a rate equal to [* * *] rate in effect on the date that payment was due, as published by *The Financial Times*. For purposes of this Section 4.6, the due date for any overpayment or underpayment determined pursuant to any audit, review, investigation or adjustment hereunder shall be the date specified in the relevant provision in this Agreement for payment of such overpayment or underpayment after completion of such audit, review, investigation or adjustment and no interest shall be retroactively payable back to the original due date for the payments underlying any such overpayment or underpayment.

Article 5 INTELLECTUAL PROPERTY RIGHTS

5.1 Prosecution. Promptly after the Effective Date and thereafter, GMI shall provide or cause to be provided to Pfizer or its counsel a copy of the patent office files with respect to filing, prosecution and maintenance of the GMI Patent Rights licensed to Pfizer under this Agreement. [* * *]

Neither Party shall have liability to the other Party for any act, omission, or default or neglect of outside counsel selected pursuant to this Section 5.1 with respect to filing, prosecuting or maintaining of GMI Patent Rights pursuant to this Section 5.1.

5.2 Notices of Infringement.

(a) Each Party shall give the other Party notice of any actual or suspected infringement of GMI Patent Rights in the Territory that comes to the Party's attention. The notice requirements of this Section 5.2(a) shall be limited to those circumstances where the actual or suspected infringement, is with respect to the manufacture, use, sale, import or offering for sale of Licensed Product in the Field.

(b) With respect to the alleged infringement by a Third Party of GMI Patent Rights by making, using, selling, importing or offering for sale a Licensed Product in the Field in the Territory (a "Product Infringement"), as between GMI and Pfizer, Pfizer will have the first right (but not the obligation) to bring any infringement action or proceeding against such Product Infringement, at the cost and expense of Pfizer, by counsel of its own choice. GMI will have the right, at its own cost and expense, to be represented in any such action by counsel of its own choice, but Pfizer shall control such infringement action.

(c) For any action pursuant to Section 5.2(b) to terminate any Product Infringement of GMI Patent Rights that Pfizer is entitled to bring, in the event that Pfizer is unable to initiate or prosecute such action solely in its own name, GMI will join such action voluntarily and will execute all documents necessary for Pfizer to initiate litigation to prosecute and maintain such action. In connection with any action, Pfizer and GMI will cooperate fully and will provide each other with any information or assistance that the other may reasonably request, at the expense of the enforcing Party. Pfizer will have the right to control such action, including the settlement thereof, provided, however, that Pfizer shall not settle or compromise any claim or proceeding that adversely affects the scope, validity or enforceability of any GMI Patent Right licensed to Pfizer unless agreed to in writing by both Parties, which consent shall not be unreasonably withheld. Any damages or other monetary awards recovered pursuant to any suit, proceeding or other legal action taken under this Section 5.2 will be allocated first to the costs and expenses of Pfizer, and second to the costs and expenses (if any) of GMI that were not otherwise reimbursed, with any remaining amounts (if any) to be allocated to Pfizer and such remaining amount shall be Net Sales subject to royalty under this Agreement.

(d) Each Party shall inform the other Party of any certification regarding any GMI Patent Rights in the United States it has received pursuant to either 21 U.S.C. §§355(b)(2)(A)(iv) or (j)(2)(A)(vii)(IV) or its successor provisions or any similar provisions in the Territory and shall provide the other Party with a copy of such certification within ten (10) Business Days of receipt. Pfizer's rights with respect to the initiation and prosecution of any legal action as a result of such certification or any recovery obtained as a result of such legal action shall be as defined in Section 5.2(b), and (c).

(e) In the event that a Third Party files a declaratory judgment action or any other type of action or proceeding with respect to any GMI Patent Rights against either Party or both Parties in the Territory, such Party shall provide written notice thereof to the other Party within ten (10) Business Days thereafter. Pfizer shall have the first right within its sole discretion, but not the obligation, to control the defense thereof with attorneys selected by Pfizer, at the cost and expense of Pfizer. Pfizer shall not settle or compromise such an action or proceeding in a manner that materially adversely affects the scope, validity or enforceability of any GMI Patent Rights in the Territory without the written consent of GMI, which consent shall not be withheld unreasonably. If Pfizer is unable to defend such action solely in its own name, GMI shall join such action voluntarily and shall execute and cause its Affiliates and sublicensees to execute all documents necessary for Pfizer to defend such action. Pfizer shall keep GMI reasonably informed of the course of such action.

5.3 Extensions. The Parties shall discuss with each other obtaining any patent term extension, such as extension under 35 U.S.C. § 156, patent term restoration or supplemental protection certificates or their equivalents in any country in the Territory with respect to any patent term extension regarding GMI Patent Rights, in each case that contain a claim that would be infringed by manufacture, use, importation, offer for sale or sale of a Licensed Product in the Field. Pfizer shall have the right to make the election in its sole discretion with respect to GMI Patent Rights and GMI shall abide by such election with respect to GMI Patent Rights and, if requested by Pfizer, cooperate with Pfizer to supply information and assistance useful in obtaining patent term extension.

Article 6 CONFIDENTIALITY; PUBLICATION

6.1 Confidential Information.

(a) All information including Know-How disclosed by one Party to the other Party hereunder shall be considered confidential information of the disclosing Party ("Confidential Information"). Subject to Sections 6.1(b) and (c), each Party agrees that (i) during the Term and for [* * *] ([* * *]) years after the Term it will keep confidential, and will cause its Affiliates to keep confidential, all of the other Party's Confidential Information, (ii) each Party and its respective Affiliates shall use any Confidential Information only as expressly permitted in this Agreement; (iii) it shall take such action, and to cause its Affiliates to take such action, to preserve the confidentiality of the other Party's Confidential Information as it would customarily take to preserve the confidentiality of its own similar types of confidential information, but in no event less than reasonable care and (iv) no Party shall disclose such Confidential Information to any Third Parties under any circumstance without the prior written consent of the other Party, except to the extent that such Confidential Information:

(i) is known by the receiving Party at the time of its receipt, and not through a prior disclosure by the disclosing Party, as documented by the receiving Party's business records;

(ii) is or becomes part of the public domain through no fault of the receiving Party;

(iii) is subsequently disclosed to the receiving Party by a Third Party who may lawfully do so and is not under an obligation of confidentiality to the disclosing Party; or

(iv) is developed by the receiving Party independently of information received from the disclosing Party, as documented by the receiving Party's business records.

(b) Notwithstanding the obligations in Section 6.1(a), Pfizer has the right to use and permit a Third Party to use the Confidential Information of GMI that is licensed to Pfizer pursuant to the license and rights granted to Pfizer under this Agreement. In addition, Pfizer may disclose the Confidential Information of GMI, if such disclosure: (i) is made by Pfizer, its Affiliates or Sublicensees to a Regulatory Authority in order to gain or maintain approval to conduct clinical trials of Licensed Product or to market Licensed Product in the Territory, in which case Pfizer, its Affiliate or Sublicensee shall request confidential treatment thereof to the extent permitted by applicable law, rule or regulation; (ii) is under an obligation of confidentiality and is made by Pfizer to Sublicensees, Affiliates, agents, consultants, or other Third Parties, in each case for the research, development, manufacturing or commercialization of Licensed Product in the Field and/or is made by Pfizer in connection with a permitted assignment of this Agreement, or a licensing transaction related to Licensed Product in the Field, which obligation of confidentiality provides that the Third Party agrees to be bound by confidentiality and non-use obligations substantially similar to those contained in Article 6 of this Agreement, and that such information will only be used for the applicable purpose; (iii) is in connection with filing or prosecuting GMI Patent Rights or trademark rights by Pfizer as permitted by this Agreement but only after the consent of GMI which shall not be unreasonably withheld, (iv) is in connection with prosecuting or defending litigation by Pfizer as permitted by this Agreement, (v) is in connection with posting results of and other information about clinical trials to clincialtrials.gov or PhRMA websites, and (vi) is necessary or desirable by Pfizer in order to enforce its rights under this Agreement; provided that in the case of any such disclosure pursuant to subparts (iv) and (vi), to the extent that Pfizer is not prohibited by applicable law

from doing so, Pfizer shall promptly inform GMI of the proposed disclosure in order to provide GMI an opportunity to challenge or limit the disclosure obligations. GMI may disclose information received from Pfizer under this Agreement that is Confidential Information of Pfizer (i) to Regulatory Authorities in order to respond to inquiries, requests or investigations relating to this Agreement; (ii) to the extent necessary or desirable in order to enforce its rights under this Agreement; (iii) in connection with an assignment of this Agreement or (iv) in connection with a potential or completed loan, financing or investment in GMI or Change of Control of GMI, provided that in the case of any such disclosure pursuant to subpart (ii), to the extent that GMI is not prohibited by applicable law from doing so, GMI shall promptly inform Pfizer of the proposed disclosure in order to provide Pfizer an opportunity to challenge or limit the disclosure obligations; and provided further that such disclosure by GMI under subparts (iii) and (iv) is under confidentiality and non-use provisions substantially similar to those of GMI under Article 6 of this Agreement and that such information will only be used for the purposes of such transaction; and provided, further, that GMI may disclose the following information in the normal conduct of its business: (A) the amount of the payment received pursuant to Section 4.1(a), (B) the total amounts of all payments potentially payable under Section 4.1 (but not any individual amount or subtotal amount thereunder), and (C) the fact that Pfizer may pay "tiered, double-digit" royalties to GMI hereunder; provided, however, that any press release regarding this Agreement or events occurring hereunder shall in any event be subject to Section 6.4.

(c) If a Party is required by law or regulation (including, without limitation, regulations of the Securities and Exchange Commission and the U.S. Food and Drug Administration) or judicial or administrative process to disclose Confidential Information that is subject to the non-disclosure provisions of this Section 6.1, to the extent that such Party is not prohibited by applicable law from doing so, such Party shall promptly inform the other Party of the disclosure that is being sought in order to provide the other Party an opportunity to challenge or limit the disclosure obligations. Confidential Information that is disclosed by law or regulation or judicial or administrative process shall remain otherwise subject to the confidentiality and non-use provisions of this Section 6.1, and the Party disclosing Confidential Information pursuant to law or court order shall, except where impracticable, take all steps reasonably necessary, including without limitation obtaining an order of confidentiality, to ensure the continued confidential treatment of such Confidential Information.

6.2 Publication.

(a) Without limiting any rights or obligations of the Parties under Sections 6.1, 6.2(b), 6.2(c) and 6.3, during the Term, each Party shall submit to the other Party (the "Non-Disclosing Party") for review and approval any proposed academic, scientific and medical publication or public presentation which contains the Non-Disclosing Party's Confidential Information. In addition, GMI shall submit to Pfizer for review and approval any proposed publication or public presentation relating to the Compounds, Licensed Products or any pre-clinical or clinical studies conducted by or on behalf of GMI with respect thereto. In both instances, such review and approval will be conducted for the purposes of preserving the value of each Party's Patent Rights and Know-How, the rights granted to Pfizer hereunder and determining whether any portion of the proposed publication or presentation containing the Non-Disclosing Party's Confidential Information should be modified or deleted. Written copies of such proposed publication or presentation required to be submitted hereunder shall be submitted to the Non-Disclosing Party no later than thirty (30) days before submission for publication or presentation. The Non-Disclosing Party shall provide its comments with respect to such publications and presentations within fifteen (15) Business Days after its receipt of such written copy from the other Party. The review period may be extended for an additional thirty (30) days in the event the Non-Disclosing Party can demonstrate reasonable need for such extension including for the preparation and filing of patent applications. GMI and Pfizer will each comply with standard academic practice regarding authorship of scientific publications and recognition of contribution of other parties in any publication. For the sake of clarity, (1) Pfizer shall have the right, subject to GMI's rights of review as set forth above, to include in its academic, scientific and medical publications and public presentations any pre-clinical and clinical data and results relating to any Licensed Product or Compound, including without limitation any such data and results provided to Pfizer under Section 2.3 and data and results of the Ongoing Clinical Study, (2) subject to Section 6.2(b) GMI shall not include in its academic, scientific and medical publications and public presentations any pre-clinical and clinical data and results relating to any

Licensed Product or Compound, including without limitation any such data and results provided to Pfizer under 2.3 and data and results of the Ongoing Clinical Study, without Pfizer's prior written consent, such consent not to be unreasonably withheld, and (3) Pfizer's obligation to submit any publication to GMI for review and approval under this Section 6.2(a) shall not apply to any publication which does not contain GMI's Confidential Information.

(b) Pfizer understands that there are rights to publish under existing agreements between GMI and Third Parties which are subject to certain restrictions, and nothing in this Section 6.2 shall limit such publication rights pursuant to such agreements; provided, however that GMI, to the extent practicable in light of such restrictions, shall provide Pfizer with the opportunity to review and comment on such publications as set forth above.

(c) Except as permitted by Section 6.1, Pfizer shall not have the right to publish or disclose Confidential Information of GMI pursuant to Section 6.2(a) that is not pre-clinical data and/or clinical data or results without the written consent of GMI.

6.3 Disclosure of the Agreement.

(a) Neither Party shall disclose the terms of this Agreement, except either Party shall be permitted to disclose the terms of this Agreement to the extent required, in the reasonable opinion of such Party's legal counsel, to comply with applicable laws, rules or regulations, including without limitation the rules and regulations promulgated by the United States Securities and Exchange Commission ("SEC") or any other governmental agency. Notwithstanding the foregoing, before disclosing this Agreement or any of the terms hereof pursuant to this Section 6.3(a), the Parties shall allow at least fifteen (15) days for the other Party to review the disclosure of the terms of this Agreement for which confidential treatment will be sought in making any such disclosure. If a Party wishes to disclose this Agreement or any of the terms hereof in accordance with this Section 6.3(a), such Party agrees, at its own expense, to the extent available to seek confidential treatment of the portions of this Agreement or such terms as may be reasonably requested by the other Party, provided that the disclosing Party shall always be entitled to make such disclosure even if such treatment is or cannot be obtained from the governmental agency or authority.

(b) Either Party may also disclose the terms of this Agreement in confidence to (i) its Affiliates, attorneys, consultants and advisors, (ii) in connection with a potential Change of Control, to potential acquirors (and their respective professional advisors), (iii) as a part of their due diligence investigations, to or existing and potential investors or lenders (and their respective professional advisors) of such Party, or (iv) to permitted assignees, in each of the foregoing cases under an agreement to keep the terms of this Agreement confidential under terms of confidentiality and non-use substantially similar to the terms contained in Article 6 of this Agreement and to use such confidential information solely for the purpose permitted pursuant to this Section 6.3(b). Notwithstanding the foregoing, if GMI after exerting reasonable efforts cannot obtain an agreement of confidentiality as to this Agreement in connection with a financing and/or public offering, GMI shall have the right to disclose this Agreement and/or the terms thereof without an obligation of confidentiality; *provided* that GMI provides written notice to Pfizer at least five (5) Business Days prior to such disclosure and [* * *] until in GMI's reasonable judgment such disclosure should be made by GMI.

6.4 Press Releases. The public announcement of the execution of this Agreement is set forth Schedule 6.4 attached hereto and GMI shall be permitted to distribute such public announcement upon execution hereof by both Parties. Subject to the foregoing provisions of this Article 6, GMI or Pfizer may issue subsequent press releases with respect to events that occur pursuant to this Agreement with the consent of the other Party, which consent shall not be unreasonably withheld; *provided* that each Party shall allow the other Party [* * *] days to review the proposed press release prior to providing its consent for the issuance of the press release.

Article 7 REPRESENTATIONS AND WARRANTIES; ADDITIONAL COVENANTS

7.1 Representations and Warranties by GMI. As of the Effective Date, GMI represents and warrants to Pfizer that:

(a) it has the right to grant the rights and licenses granted to Pfizer under this Agreement, and pursuant to this Agreement, Pfizer has been granted such rights and licenses;

(b) to its Knowledge, the granted patents encompassed within the GMI Patent Rights of Exhibit A are valid and enforceable, and no Third Party has challenged or threatened to assert a challenge to the validity or enforceability of the GMI Patent Rights of Exhibit A (including by way of example through the institution or written threat of institution of interference, nullity or similar invalidity proceedings before the United Stated Patent and Trademark Office or any analogous foreign entity);

(c) to its Knowledge, the manufacture, use, sale, offer to sell, importation or exploitation by GMI or Pfizer (or their respective Affiliates) of any Licensed Product or Compound as formulated and manufactured as of the Effective Date does not infringe any issued patent of a third party;

(d) Exhibit A contains a complete and correct list of all GMI Patent Rights;

(e) it is the sole owner of all the GMI Patent Rights, free of any lien, encumbrance, charge, security interest, mortgage or other similar restriction. No Person (including any Affiliate of GMI) has any right, interest or claim in or to, and neither GMI nor any of its Affiliates has entered into any agreement granting any right, interest or claim in or to, any GMI Patent Rights or GMI Know-How, except for the rights granted to Third-Party service providers or investigators solely to conduct the On Going Clinical Trial and the other studies as listed on Schedule 2.1 (which rights do not include the right to practice or use the GMI Patent Rights or GMI Know-How to manufacture, commercially distribute or sell the Compound and/or Licensed Product). All inventors of the GMI Patent Rights have assigned to GMI their rights in such GMI Patent Rights and all such assignments are valid and enforceable;

(f) it has complied in all material respects with all applicable Laws in connection with the filing, prosecution and maintenance of the GMI Patent Rights of Exhibit A;

(g) there is no action, claim, demand, suit, proceeding, arbitration, grievance, citation, summons, subpoena, inquiry or investigation of any nature, civil, criminal, regulatory or otherwise, in law or in equity, pending or, to the Knowledge of GMI, threatened against GMI, any of its Affiliates or, to the Knowledge of GMI, any Third Party, in each case in connection with the GMI Patent Rights of Exhibit A, GMI Know-How, the Compounds or the Licensed Products or relating to the transactions contemplated by this Agreement;

(h) all necessary consents, approvals and authorizations of all government authorities and other entities or persons required to be obtained by GMI as of the Effective Date in connection with the execution, delivery and performance of this Agreement and the granting of the rights and licenses granted under this Agreement have been obtained;

(i) no Person, including but not limited to any holder of GMI's Series A-1 Preferred Stock or any investor in any other round of financing of GMI, has any option or other right to negotiate any license, option, collaboration, joint venture, sale or any similar transaction with GMI with respect to the Compound or Licensed Product in the Territory except as listed in Schedule 7.1; provided that, as of the Effective Date, GMI has the right to grant the license granted to Pfizer under this Agreement free and clear of any such option and/or other right of any Person set forth in Schedule 7.1 and after the Effective Date any Person set forth in Schedule 7.1 has no further option or right to negotiate any license, option, collaboration, joint venture, sale or any similar transaction with GMI with respect to the Compound or Licensed Product in the Territory;

(j) to its Knowledge, GMI has not used in any capacity the services of any person or entity debarred under Section 306 of the Federal Food, Drug and Cosmetic Act in connection with the research, development or manufacture of Product;

(k) None of the rights of GMI or its Affiliates under the GMI Patent Rights of Exhibit A were developed with federal funding from the United States government or any other Governmental Authority;

(l) None of the GMI Patent Rights of Exhibit A have been licensed from a Third Party;

(m) GMI has heretofore disclosed to Pfizer all material scientific and technical information and all information relating to safety and all material information relating to efficacy, in each case with respect to any Compound or Licensed Product, and in each case that is known to GMI;

(n) GMI has heretofore disclosed to Pfizer all material correspondence and contact information between GMI and the FDA and any other Regulatory Authorities regarding the Compounds or the Licensed Products;

(o) it is a corporation duly organized, validly existing and in good standing under the laws of Delaware and has the right, power and authority to enter into this Agreement and to make the promises set forth in this Agreement;

(p) it has taken all necessary action on its part, including but not limited to action required by Law, its certificate of incorporation, by-laws or other organizational documents or any agreement to which it is party or to which it may be subject, required to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder;

(q) it has duly executed and delivered this Agreement and, assuming due delivery and execution by Pfizer, this Agreement constitutes a legal, valid and binding obligation of GMI, enforceable against GMI in accordance with its terms; except to the extent that such enforceability may be limited by bankruptcy, insolvency, or other similar laws relating to creditors' rights generally; and

(r) the execution, delivery and performance of this Agreement do not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it is bound, nor to its Knowledge, violate any Law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it.

7.2 Representations and Warranties by Pfizer. As of the Effective Date, Pfizer represents, and warrants to GMI that:

(a) it is a corporation duly organized, validly existing and in good standing under the laws of Delaware and has the right, power and authority to enter into this Agreement and to make the promises set forth in this Agreement;

(b) it has taken all necessary action on its part, including but not limited to action required by Law, its certificate of incorporation, by-laws or other organizational documents or any agreement to which it is party or to which it may be subject, required to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder;

(c) it has duly executed and delivered the Agreement, and assuming due delivery and execution by GMI this Agreement constitutes a legal, valid and binding obligation of Pfizer, enforceable against Pfizer in accordance with its terms; except to the extent that such enforceability may be limited by bankruptcy, insolvency, or other similar laws relating to creditors' rights generally; and

(d) the execution, delivery and performance of this Agreement do not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it is bound, nor to its Knowledge, violate any Law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it.

7.3 LIMITATIONS. EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER GMI NOR PFIZER MAKES ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WITH RESPECT TO THE SUBJECT MATTER OF THIS AGREEMENT AND EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN THIS ARTICLE 7, EACH PARTY HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR REPRESENTATION REGARDING CLINICAL EFFECTIVENESS OF LICENSED PRODUCT OR THAT ANY PATENT APPLICATION WILL BE GRANTED OR THAT A LICENSED PRODUCT CAN BE SUCCESSFULLY DEVELOPED OR COMMERCIALIZED.

7.4 Additional Covenants.

(a) Compliance with Laws. Each of GMI and Pfizer shall conduct, and shall use reasonable efforts to cause its Affiliates to conduct, all its activities contemplated under this Agreement in accordance with all applicable Laws of the country in which such activities are conducted.

(b) Reasonable Access. From and after the Effective Date, GMI shall, upon reasonable notice from Pfizer, provide Pfizer and its agents and representatives with reasonable access, during regular business hours, to (i) all information concerning Compounds, Licensed Products and/or GMI Patent Rights, and (ii) all employees of GMI who possess any information described in clause (i) of this Section 7.4(b), in each case to the extent reasonably necessary to allow Pfizer to exercise its rights or carry out its obligations under this Agreement.

7.5 Exclusion of Certain Damages. Except with respect to an obligation of either Party to indemnify the other hereunder, neither Party shall be liable to the other for consequential, incidental, indirect or punitive damages arising from the performance or nonperformance of such Party under this Agreement whether such claim is based on contract, tort (including negligence) or otherwise, even if an authorized representative of such Party is advised of the possibility or likelihood of same.

Article 8 INDEMNITY

8.1 Indemnification by Pfizer. Pfizer agrees to defend, indemnify and hold harmless GMI and its Affiliates and their respective directors, officers and employees (individually and collectively, the "GMI Indemnitee(s)") from and against any and all costs, expenses, claims, losses, liabilities, damages, fines, royalties, governmental penalties or punitive damages, deficiencies, interest, settlement amounts, awards, and judgments, including any and all reasonable, out-of-pocket costs and expenses properly incurred as a result of a claim (including reasonable, out-of-pocket attorneys' fees and all other expenses reasonably incurred in investigating, preparing or defending any litigation or proceeding, commenced or threatened), in each case, net of any insurance recovery received as a result of such cost (collectively, "Losses")

resulting from any claims, demands, actions or other proceedings by any Third Party to the extent arising from (a) the research, development, testing, manufacture, use, handling, storage, commercialization, marketing, sale or other disposition of Licensed Products by or on behalf of Pfizer or any of its Affiliates or Sublicensees in the Territory during the Term or thereafter pursuant to Section 9.1 or 9.10 of this Agreement, or (b) the use of Licensed Products that were sold or distributed by or on behalf of Pfizer or any of its Affiliates or Sublicensees during the Term or thereafter pursuant to Section 9.1 or 9.10 of this Agreement, or (c) the negligence, recklessness or intentional misconduct or unlawful act of Pfizer or its Affiliates or Sublicensees in exercising rights and/or carrying out activities under this Agreement or the licenses granted under this Agreement, or (d) a breach of a representation, warranty or covenant made by Pfizer under this Agreement.

8.2 Indemnification by GMI. GMI agrees to defend, indemnify and hold harmless Pfizer, and its Affiliates, and their directors, officers and employees (individually and collectively, the "Pfizer Indemnitee(s)") from and against all Losses resulting from any claims, demands, actions or other proceedings by any Third Party to the extent arising from (a) the research, development or commercialization of the Compounds or Licensed Products by or on behalf of GMI or its Affiliates or licensees prior to the Effective Date or subsequent to the Effective Date and prior to completion of the Ongoing Clinical Trial, (b) the research, development or commercialization after termination of this Agreement of any Compounds or Licensed Product by or on behalf of GMI or its Affiliates, where such Compound or Licensed Product was researched, developed or commercialized pursuant to the license granted to GMI under Section 9.5 or with the use of any of the information, documents or other materials transferred to GMI pursuant to Section 9.5(e), (c) the use of Licensed Products that were sold or distributed by or on behalf of GMI or any of its Affiliates prior to the Effective Date, or subsequent to the Effective Date and prior to completion of the Ongoing Clinical Trial, (d) the use of Licensed Products sold or distributed by or on behalf of GMI or any of its Affiliates after termination of this Agreement, where such Compound or Licensed Product was researched, developed or commercialized pursuant to the license granted to GMI under Section 9.5 or with the use of any of the information, documents or other materials transferred to GMI pursuant to

Section 9.5(e), or (e) the negligence, recklessness or intentional misconduct or unlawful act of GMI or its Affiliate in exercising rights and/or carrying out activities under this Agreement or pursuant to the rights granted by Pfizer to GMI pursuant to Section 9.6 of this Agreement, or (d) a breach of representation, warranty or covenant made by GMI under this Agreement.

8.3 Indemnitee/Indemnifying Party. Each of the Pfizer Indemnitee and GMI Indemnitee shall be an "Indemnitee" for the purpose of this Article 8, and the Party that is obligated to indemnify the Indemnitee under Section 8.1 or Section 8.2 shall be the "Indemnifying Party."

8.4 Defense Procedures; Procedures for Third Party Claims. In the event that any Third Party (in no event to include any Affiliate of any of the parties) asserts a claim with respect to any matter for which an Indemnitee is entitled to indemnification hereunder (a "Third Party Claim"), then the Indemnitee shall promptly notify the Indemnifying Party thereof; *provided, however,* that no delay on the part of the Indemnitee in notifying the Indemnifying Party shall relieve the Indemnifying Party from any obligation hereunder unless (and then only to the extent that) the Indemnifying Party is prejudiced thereby.

(a) The Indemnifying Party shall have the right, exercisable by notice to the Indemnitee within ten (10) Business Days after receipt of notice from the Indemnitee of the commencement of or assertion of any Third Party Claim, to assume direction and control of the defense, litigation, settlement, appeal or other disposition of the Third Party Claim (including the right to settle the claim solely for monetary consideration) with counsel selected by the Indemnifying Party and reasonably acceptable to the Indemnitee; *provided* that (i) the Indemnifying Party has sufficient financial resources, in the reasonable judgment of the Indemnitee, to satisfy the amount of any adverse monetary judgment that is sought, (ii) the Third Party Claim seeks solely monetary damages and (iii) the Indemnifying Party expressly agrees in writing that as between the Indemnifying Party and the Indemnitee, the Indemnifying Party shall be solely obligated to satisfy and discharge the Third Party Claim in full (the conditions set forth in clauses (i), (ii) and (iii) above are collectively referred to as the "Litigation Conditions").

(b) Within ten (10) Business Days after the Indemnifying Party has given notice to the Indemnitee of its exercise of its right to defend a Third Party Claim, the Indemnitee shall give notice to the Indemnifying Party of any objection thereto based upon the Litigation Conditions. If the Indemnitee reasonably so objects, the Indemnitee shall continue to defend the Third Party Claim, at the expense of the Indemnifying Party, until such time as such objection is withdrawn. If no such notice is given, or if any such objection is withdrawn, the Indemnifying Party shall be entitled, at its sole cost and expense, to assume direction and control of such defense, with counsel selected by the Indemnifying Party and reasonably acceptable to the Indemnitee. During such time as the Indemnifying Party is controlling the defense of such Third Party Claim, the Indemnitee shall cooperate, and shall cause its Affiliates and agents to cooperate upon request of the Indemnifying Party, in the defense or prosecution of the Third Party Claim, including by furnishing such records, information and testimony and attending such conferences, discovery proceedings, hearings, trials or appeals as may reasonably be requested by the Indemnifying Party. In the event that the Indemnifying Party does not satisfy the Litigation Conditions or does not notify the Indemnitee of the Indemnifying Party's intent to defend any Third Party Claim within ten (10) Business Days after notice thereof, the Indemnitee may (without further notice to the Indemnifying Party) undertake the defense thereof with counsel of its choice and at the Indemnifying Party's expense (including reasonable, out-of-pocket attorneys' fees and costs and expenses of enforcement or defense). The Indemnifying Party or the Indemnitee, as the case may be, shall have the right to join in (including the right to conduct discovery, interview and examine witnesses and participate in all settlement conferences), but not control, at its own expense, the defense of any Third Party Claim that the other Party is defending as provided in this Agreement.

(c) The Indemnifying Party shall not, without the prior consent of the Indemnitee, enter into any compromise or settlement that commits the Indemnitee to take, or to forbear to take, any action. The Indemnitee shall have the sole and exclusive right to settle any Third Party Claim, on such terms and conditions as it deems reasonably appropriate, to the extent such Third Party Claim involves equitable or other non-monetary relief, but shall not have the right to settle such Third Party Claim to the extent such Third Party Claim involves monetary damages without the prior written consent of the Indemnifying Party. Each of the Indemnifying Party and the Indemnitee shall not make any admission of liability in respect of any Third Party Claim without the prior consent of the other party, and the Indemnitee shall use reasonable efforts to mitigate losses arising from the Third Party Claim.

(d) Notwithstanding the foregoing, the Indemnitee may be represented by separate counsel of its choosing at the cost and expense of the Indemnifying Party if a conflict of interest exists such that the counsel selected by the Indemnifying Party cannot simultaneously represent the Indemnitee.

8.5 LIMITATIONS. IN NO EVENT SHALL ANY PARTY OR ANY OF ITS RESPECTIVE AFFILIATES BE LIABLE UNDER THIS AGREEMENT FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, WITH RESPECT TO ACTIVITIES UNDER OR IN CONNECTION WITH THIS AGREEMENT SUFFERED BY PFIZER, GMI OR ANY OF THEIR RESPECTIVE REPRESENTATIVES, EXCEPT (A) FOR PURPOSES OF INDEMNIFICATION PURSUANT TO THIS ARTICLE 8, OR (B) IN THE EVENT OF AN INTENTIONAL OR WILLFUL BREACH IN BAD FAITH OF ANY REPRESENTATION, WARRANTY, COVENANT OR AGREEMENT BY GMI OR PFIZER (AS THE CASE MAY BE) CONTAINED IN THIS AGREEMENT; PROVIDED THAT THIS SECTION SHALL NOT RELIEVE EITHER PARTY FROM ITS PAYMENT OBLIGATIONS UNDER THIS AGREEMENT.

Article 9 TERM AND TERMINATION

9.1 Term. The term of this Agreement shall be effective as of the Effective Date and shall continue in effect until the earlier of (i) termination of this Agreement under this Article 9 or (ii) expiration of all royalty payment obligations hereunder (the "Term"). Upon expiration (but not termination of this Agreement), the licenses granted to Pfizer under Section 2.1 of this Agreement shall become a fully paid-up, irrevocable, royalty-free, perpetual license.

9.2 Termination at Will. Notwithstanding anything contained herein to the contrary, Pfizer shall have the right to terminate this Agreement in its sole discretion in its entirety by giving [* * *] ([* * *]) days prior written notice to GMI.

9.3 Termination for Breach. In addition to the termination provision of Section 9.2, this Agreement may be terminated at any time during the Term by a Party if the other Party materially breaches or materially defaults in the performance or observance of an obligation under this Agreement. A written notice of such breach shall be sent by a Party to the other Party and the written notice shall specify the breach, and if such written notice has been given and the applicable Party has not cured a payment breach by making a payment within [* * *] ([* * *]) days of the written notice or has not cured a breach that is not a payment breach within [* * *] ([* * *]) days of the written notice, then by prompt further written notice to the breaching party after the expiration of the applicable period without cure, the notifying Party may terminate this Agreement. For the avoidance of doubt, material breaches that may permit termination under this Section 9.3 by the non-breaching Party include, without limitation, uncured material failures to make payments when due and uncured material breaches under Section 2.1, 2.3, 3.1(a), 3.2(a), Article 6, Article 7, Article 8 and Article 10 of this Agreement.

9.4 Termination for Insolvency. Each Party shall have the right to terminate this Agreement upon written notice (a) if voluntary or involuntary proceedings by or against the other Party are instituted in bankruptcy or under any insolvency law, or a receiver or custodian is appointed for the other Party, or proceedings are instituted by or against the other Party for corporate reorganization or the dissolution or liquidation of the other Party under the U.S. Bankruptcy Code, which proceedings, if involuntary, shall not have been dismissed within [* * *] ([* * *]) days after the date of filing, or if the other Party makes an assignment for the benefit of creditors, or substantially all of the assets of the other Party are seized or attached and not released within [* * *] ([* * *]) days thereafter, or (b) upon the voluntary liquidation, dissolution, winding up or cessation of business by the other Party other than in connection with a permitted assignment of this Agreement.

9.5 Consequences of Termination. Upon (i) termination of this Agreement by GMI or (ii) termination of this Agreement by Pfizer in accordance with Section 9.2:

(a) Except as expressly set forth herein, including in Section 9.13, all rights and licenses granted to Pfizer under this Agreement shall terminate and neither Pfizer nor its Affiliates shall research, develop, market, sell or otherwise commercialize a Licensed Product and/or Compound.

(b) Subject to Section 9.5(c), upon written notice from GMI, Pfizer agrees to grant to GMI as of the date of such termination of this Agreement a non-exclusive license, with the right to sublicense, to research, develop, make, have made, use, export, import, offer to sell, sell and commercialize Compounds and Licensed Products in the Reference Forms, in the Field in the Territory under Pfizer Patent Rights and Pfizer Know-How, and upon such written notice such license shall be automatically granted without any further action by Pfizer or GMI.

(c) In the event that Pfizer Patent Rights and/or Pfizer Know-How are licensed to Pfizer by a Third Party, and such Pfizer Patent Rights and/or Pfizer Know-How are reasonably required by GMI to make, have made, use, sell, offer to sell, import, export, research, develop and/or commercialize Compounds and/or Licensed Products and Pfizer has the right to grant a sublicense thereunder to GMI when this Agreement is terminated, Pfizer shall notify GMI of such Pfizer Patent Rights and Pfizer Know-How, and then at the request of GMI, Pfizer shall grant to GMI such a sublicense to the fullest extent permitted under the license under which the sublicense is granted and subject to the terms, conditions and requirements thereof to make, have made, use, sell, offer to sell, import, export, research, develop and/or commercialize Compounds and Licensed Products to the same extent and as set forth in Section 9.5(b). Such sublicense shall be granted in a separate agreement without additional consideration to Pfizer, provided that GMI [* * *].

(d) In the event that at the date of such termination Pfizer or its Affiliate or their supplier is responsible for manufacturing a Licensed Product and/or Compounds for the purposes of conducting clinical trials and/or for commercializing a Licensed Product in the Territory, then upon GMI's written request until the earlier of (A) the date that GMI obtains an alternative supply thereof or (B) (i) with respect to the supply of the Licensed Product and/or Compounds prior to Regulatory Approval in a country in the Territory, [* * *], and (ii) with respect to the supply of the Licensed Product and/or Compounds for commercial sale after Regulatory Approval (and Pricing Approval, if applicable), [* * *], at GMI's option, Pfizer shall supply such Licensed Product and Compounds to GMI at Pfizer's or its Affiliate's cost for such

Licensed Product and/or Compounds (and in the case where Pfizer or its Affiliate manufactures such Licensed Product and/or Compounds, such cost shall be [* * *] percent ([* * *]%) of Pfizer' or its Affiliate's fully-burdened manufacturing cost for such Licensed Product and/or Compounds); *provided however*, if there are restrictions in an agreement between Pfizer or an Affiliate of Pfizer and a Third Party governing the manufacture or supply of such Licensed Product and/or any such Compound that would limit the amount of such Licensed Product and/or any such Compound that could be supplied to GMI or that would preclude the period from being up until [* * *], then the limits in such agreement as to the amount of such Licensed Product and/or any such Compound that could be supplied shall govern and such period shall be up to as long a time as permitted under such agreement, and further provided that if Pfizer or its Affiliate is manufacturing the Compound and/or Licensed Product, Pfizer shall not be obligated to manufacture and supply such Compound and/or Licensed Product in amounts that exceed the amounts of such Compound and/or Licensed Product which were being manufactured by Pfizer or its Affiliate as of the date of termination. Notwithstanding the foregoing, in the event that Pfizer is obtaining supplies from a Third Party, the Parties shall meet and discuss in good faith whether it is possible to assign the Third Party agreements to GMI.

(e) Upon the request of GMI, Pfizer shall transfer to GMI, at the cost and expense of Pfizer, clinical data from any Additional Phase II Clinical Trial and any Phase III Clinical Trial of a Licensed Product, all marketing authorizations, INDs and other regulatory filings and Regulatory Approvals in the Territory for any Licensed Product that is being developed and/or commercialized by Pfizer or its Affiliates as of the date of such termination. For the avoidance of doubt, Pfizer will transfer ownership of the items described in the preceding sentence, together with the privileges, benefits and obligations associated with the ownership of such items. In the event that in any country such transfer is not legally possible, Pfizer shall (and shall cause its Affiliates) to take all reasonable actions that are permitted by the applicable Regulatory Authority to permit GMI to also have the benefit of the relevant marketing authorizations, INDs and other regulatory filings and Regulatory Approvals in the applicable country that exist at the time of termination for any such Licensed Product in the applicable country, including allowing GMI to cross-reference data and information on file with the

Regulatory Authority in the applicable country, and to this end, Pfizer itself consents to and shall cause its Affiliates to consent to such Regulatory Authority cross-referencing to the data and information on file with such Regulatory Authority to the extent that it exists at the time of such termination as may be necessary to facilitate the granting of permitted second marketing authorizations, INDs, regulatory filings and Regulatory Approvals in applicable country to GMI. In addition, upon GMI's request, Pfizer will provide GMI for use by GMI with (a) copies of human clinical experience databases as updated following completion or termination of any ongoing trials, (b) copies of completed and final clinical study reports, (c) clinical trial master files (or equivalent), (d) copies of completed and final non-clinical study reports used to support Regulatory Approvals, (e) copies of material documents filed with a Regulatory Authority in connection with marketing authorizations, INDs and other regulatory filings and Regulatory Approvals in the applicable country that exist at the time of termination, (f) copies of correspondence with Regulatory Authorities, and (g) copies of any then-existing documentation and technical information, in the form and format in which such materials are maintained by Pfizer in the ordinary course of its business, that are necessary for the manufacture of the Licensed Product in the Reference Forms, which documentation and technical information shall include (1) copies of flow charts of the manufacturing procedures and work instructions related to manufacturing of the Licensed Product in the Reference Forms, (2) a list of all equipment, including the source of the equipment, utilized in the production of the Licensed Product in the Reference Forms, (3) copies of all current specifications for the Licensed Product in the Reference Forms, (4) copies of all standard operating procedures for the manufacturing procedures to be transferred, and (5) all environmental conditions necessary for the manufacture of the Licensed Product in the Reference Forms and copies of any existing external environmental impact studies based on the materials or methods employed in the manufacturing method to be transferred, in each case that relates to a Licensed Product in the Reference Forms and that is in the possession or control of Pfizer (including information controlled by Pfizer but in the possession of a Third Party). Pfizer shall bear its costs and expenses for the transfer described in this Section 9.5(e), subject to a limit of [* * *] of meetings and an additional [* * *], and any additional support to be provided by Pfizer shall be provided on a person-hour basis at a

rate and for a number of hours that will be agreed upon in advance between GMI and Pfizer, provided that GMI shall be responsible for any out-of-pocket expenses incurred by Pfizer in connection with any such transfer to the extent Pfizer notifies GMI of such expenses prior to incurring them and GMI agrees to reimburse such expenses to Pfizer (and if GMI does not agree to reimburse such expenses to Pfizer, Pfizer shall not be obligated to incur any such out-of-pocket expenses in connection with any such transfer).

(f) Pfizer agrees to assign and hereby assigns to GMI all right, title and interest in and to any and all trademarks that are owned by Pfizer and that prior to termination have been and/or are being used at termination with respect to Licensed Product.

9.6 Certain Payments after Termination. Notwithstanding anything to the contrary herein, in the event that (a) GMI requests the license provided for in Section 9.5(b) or requests Pfizer to transfer or provide any of the data, information or documents provided for in Section 9.5(e) and (b) as of the date of termination of this Agreement by GMI or by Pfizer under Section 9.2, Pfizer or its Affiliate has completed a Phase III Clinical Trial for a Licensed Product for an indication and GMI or its licensee files for and obtains Regulatory Approval for such Licensed Product for such indication based on such Phase III Clinical Trial, or at the date of such termination Pfizer or its Affiliate has obtained Regulatory Approval for a Licensed Product for an indication, then GMI shall pay royalties to Pfizer on GMI Net Sales of such Licensed Product for such indication at a royalty rate of [* * *] percent ([* * *]%) of GMI Net Sales at any time after the date of such termination for a period of ten (10) years from the First Commercial Sale of such Licensed Product for such indication; *provided* that GMI only shall be obligated to make such payments to Pfizer until such time as the aggregate of payments due and payable under this Section 9.6 equal [* * *] dollars ($[* * *]). In the event that (1) the preceding sentence is not applicable, (2) GMI requests the license provided for in Section 9.5(b) or requests Pfizer to transfer or provide any of the data, information or documents provided for in Section 9.5(e), and (3) as of the date of termination of this Agreement by GMI or by Pfizer under Section 9.2, Pfizer or its Affiliate has completed an Additional Phase II Clinical Trial for a Licensed Product for an indication, the results of which Additional Phase II Clinical Trial are supportive of and included in an application for Regulatory Approval for such indication, then GMI shall pay

royalties to Pfizer on GMI Net Sales of such Licensed Product for such indication at a royalty rate of [* * *] percent ([* * *]%) of GMI Net Sales at any time after the date of such termination for a period of ten (10) years from the First Commercial Sale of such Licensed Product for such indication; *provided* that GMI only shall be obligated to make such payments to Pfizer until such time as the aggregate of payments due and payable under this Section 9.6 equal [* * *] Dollars ($[* * *]). GMI shall make such payments to Pfizer within forty-five (45) days of the end of each calendar quarter in which any payment under this Section 9.6 become due and payable and each such payment shall be accompanied by a detailed written report showing the calculation of such payment. The provisions of Sections 4.2(f), 4.2(g), 4.3, 4.4, 4.5 and 4.6 shall apply, *mutatis mutandis*, to royalties payable by GMI under this Section 9.6 and for purposes of this sentence all reference to one Party in such Sections shall be deemed to refer to the other Party and all references to a Pfizer Quarter shall be deemed to refer to a calendar quarter.

9.7 Offset of Damages. In the event that Pfizer is awarded damages against GMI under this Agreement by a court of competent jurisdiction as to which Pfizer's right to collect such damages has not been stayed, in addition to any other remedy for collection of such damages, Pfizer may offset such damages against any amounts to be paid by Pfizer to GMI under this Agreement.

9.8 Termination of Rights and Obligations. Upon termination of this Agreement all rights and obligations of the Parties under this Agreement shall terminate except those that survive termination under Section 9.13.

9.9 Accrued Obligations. Any expiration or termination of this Agreement shall be without prejudice to the rights of either Party against the other accrued or accruing under this Agreement prior to expiration or termination, including without limitation the obligation to pay royalties for Licensed Product(s) sold prior to such expiration or termination.

9.10 Disposition of Inventory. Notwithstanding anything herein to the contrary, in the event of termination of this Agreement, at the option of Pfizer, Pfizer either (a) shall have for a period of [* * *] ([* * *]) months after termination, the right to use or sell Licensed Products on hand on the date of such termination and to complete Licensed Products in the process of manufacture at the time of such termination and use or sell the same as if licensed under this

Agreement, provided that Pfizer shall submit the applicable royalty report, along with the royalty payments required by this Agreement; or (b) at the request of GMI, shall transfer to GMI all existing inventory, raw material, work-in-progress and finished goods, each with respect to any Compound and Licensed Product, at a cost to GMI equal to Pfizer's fully-burdened manufacturing costs together with the reasonable cost of transportation.

9.11 Pfizer Elections upon Breach by GMI. If an event occurs that gives rise to a right of termination by Pfizer under Section 9.3 (as a result of an uncured material breach by GMI) and if Pfizer elects not to terminate this Agreement, Pfizer may elect that Sections 3.1(a) and (b), 3.2(b)(iii) shall be deleted, in whole or in part, from this Agreement and Pfizer's obligations to deliver reports pursuant to Section 3.2(b)(iv) shall be limited to [* * *]. If Pfizer makes any election as provided in this Section 9.11 to delete any Section, each of the Parties hereto will enter into an appropriate and customary written amendment and no Party shall have any further obligations with respect to any such deleted Section.

9.12 Bankruptcy. All rights and licenses granted under Section 2.1 of this Agreement are, and shall otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code, licenses of rights to "intellectual property" as defined under Section 101(35A) of the U.S. Bankruptcy Code. The Parties agree that Pfizer, as a licensee of such rights under this Agreement, shall retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code, and that upon commencement of a bankruptcy proceeding by or against GMI under the U.S. Bankruptcy Code, Pfizer shall be entitled to a complete duplicate of or complete access to any such intellectual property and all embodiments of such intellectual property that is licensed to Pfizer under this Agreement. Such intellectual property and all embodiments thereof shall be promptly delivered to Pfizer (i) upon any such commencement of a bankruptcy proceeding upon written request therefor by Pfizer, unless GMI elects to continue to perform all of its obligations under this Agreement or (ii) if not delivered under (i) above, upon the rejection of this Agreement by or on behalf of GMI upon written request therefor by Pfizer. The term "embodiments" of intellectual property includes all tangible, intangible, electronic or other embodiments of rights and licenses hereunder, including all compounds and products embodying intellectual property, Licensed Products, filings with Regulatory Authorities and related rights. The foregoing is without prejudice to any rights Pfizer may have arising under the U.S. Bankruptcy Code or other applicable law.

9.13 Survival. Following expiration or termination of this Agreement for any reason, Articles 1, 6, 8, 9 and 11 and Sections 2.4, 3.1(c)(B) and 7.5 and Sections 4.3 and 4.4 with respect to royalties paid or to be paid under this Agreement shall survive the expiration or termination.

Article 10 NON-COMPETITION

From the Effective Date until the end of the Term, GMI, its Affiliates and any Third Party on behalf of GMI or its Affiliates may not, directly or indirectly, commercialize in any country in the Territory any pharmaceutical compound or product in any dosage form or formulation that is labeled for treatment or prevention or prophylaxis of a vaso-occlusive or painful crisis associated with Sickle Cell Disease (a "Competing Product"). If GMI or any of its Affiliates controlling GMI (a "GMI Parent") undergoes a Change of Control, then the provisions of the preceding sentence shall not apply with respect to a Competing Product; *provided*, however, that such Competing Product is researched, developed and commercialized without use of any GMI Patent Rights or GMI Know-How.

Article 11 MISCELLANEOUS

11.1 Assignment.

(a) Assignment. This Agreement and the rights and obligations under this Agreement may not be assigned by operation of law or otherwise by either Party without the consent of the other Party, *provided*, *however*, that either Party may assign this Agreement, in whole or in part, without the consent of the other Party (i) to an Affiliate, or (ii) to a successor, in each case by virtue of a sale of all or substantially all of its assets related to this Agreement, merger, consolidation or similar transaction or where a Party or its Affiliate is required, or makes a good faith determination based on advice of counsel that it is required, to divest any of the Licensed Products in order to comply with Law or the order of any Governmental Authority as a result of merger of a Party with a Third Party or acquisition by a Party of a Third Party or acquisition of a

Party by a Third Party; *provided, further,* that the assigning Party shall deliver written notice of any such permitted assignment to the other Party, and the assignee shall assume all obligations of its assignor under this Agreement and such assigning party shall remain jointly and severally liable with such assignee in respect of all obligations so assigned. Subject to the restriction on assignment of this Section 11.1, this Agreement shall be binding upon and inure to the benefit of the successors and assigns of the Parties.

(b) Transfer of GMI Patent Rights. Except in connection with permitted assignments under Section 11.1(a) to a Person that is not an Affiliate of GMI, GMI and any Affiliate of GMI may not sell, assign or otherwise transfer GMI Patent Rights to any person other than a wholly-owned direct or indirect subsidiary of GMI that (x) is and continues to be at all times incorporated and domiciled (including with respect to principal headquarters) in any state of the United States of America and (y) prior to any such sale, assignment or transfer to such person described in clause (x), has acknowledged and confirmed in writing to Pfizer, all in a manner reasonably acceptable to Pfizer, that, effective as of such sale, assignment or other transfer, such transferee shall be bound by this Agreement as if it were a party to it as and to the identical extent applicable to the transferor with respect to GMI Patent Rights.

(c) Non-compliant Assignments. Any purported assignment that is not in compliance with this Section 11.1 shall be null and void.

(d) Performance by Affiliates. Pfizer shall have the right to permit an entity that is an Affiliate of Pfizer to exercise the rights and licenses granted to Pfizer under this Agreement without the granting of a sublicense while such entity is an Affiliate of Pfizer, provided that the Affiliate agrees to be bound by the terms and conditions of this Agreement as if a signatory thereto. In exercising the rights and licenses granted under this Agreement, Pfizer shall have the right to have Licensed Product in the Field researched, developed and/or made for Pfizer by a Third Party without granting a sublicense to such Third Party; *provided*, that such research, development and/or manufacture is performed for Pfizer, and Pfizer shall ensure that any such Third Party shall perform such research, development or manufacturing activities in compliance with the provisions of this Agreement.

11.2 Notices. Any consent, notice or report required or permitted to be given or made under this Agreement by one of the Parties hereto to the other shall be in writing and shall be deemed given (i) five (5) Business Days after mailing when mailed by registered or certified mail, return receipt requested, postage paid, or (ii) on the date received when delivered in person or by reputable international express delivery service, addressed to such other Party at its address indicated below, or to such other address as the addressee shall have last furnished in writing to the addressor and shall be effective upon receipt by the addressee:

If to GMI:

GlycoMimetics, Inc.
401 Professional Drive, Suite 250
Gaithersburg, Maryland 20879
Attn: CEO

If to Pfizer:

Pfizer Inc.

[XXXXX]

With a copy to:

Pfizer Inc.

[XXXXX]

11.3 Jurisdiction. Except as to Patent Rights for which the patent laws of the country of the Patent Right shall be controlling, this Agreement shall be governed by and construed in accordance with the laws of the State of New York, U.S.A, without regard to any choice of law

principles that would dictate the application of the laws of another jurisdiction. All actions and proceedings under this Agreement shall be brought exclusively in a state or federal court of competent subject matter jurisdiction in the County of New York in the State of New York. Each Party hereby waives (i) any objection which it may have at any time to the venue of the proceedings in any such court, (ii) any claim that such proceedings have been brought in an inconvenient forum and (iii) the right to object, with respect to such proceedings, that such court does not have any jurisdiction over such Party.

11.4 Dispute Resolution. Except as otherwise set forth in this Agreement, any disputes arising between the Parties relating to, arising out of or in any way connected with this Agreement or any term or condition hereof, or the performance by either Party of its obligations hereunder, shall be resolved as follows:

(a) Within [* * *] ([* * *]) days of notice of such dispute, the senior executive, or an equivalent successor thereto, to be nominated by Pfizer who is responsible for the Licensed Product, or his or her designate, and the Chief Executive Officer of GMI or his or her designate shall first attempt to resolve such dispute through good faith negotiations for a period of not less than [* * *] ([* * *]) days.

(b) If such dispute cannot be resolved after such [* * *] ([* * *]) day period then either Pfizer or GMI may initiate a legal action with respect to such dispute.

(c) This Section 11.4 shall not prevent a Party from seeking and obtaining temporary or preliminary relief in a court of competent jurisdiction to protect the interests of such Party pending the outcome of proceedings pursuant to this Section 11.4.

11.5 Entire Agreements; Amendments.

(a) This Agreement, together with the Schedules and Exhibits hereto, contains the entire understanding of the Parties with respect to the subject matter hereof and supersedes and terminates all prior and contemporaneous agreements and understandings between the Parties, whether oral or in writing, by and between Pfizer and GMI with respect to the subject matter hereof and except as provided in Section 11.5(b), including but not limited to the Confidentiality Agreement between the Parties effective [* * *]. In the event of any conflict or inconsistency between any provision of any Schedules or Exhibit hereto and any provision of

this Agreement, the provisions of this Agreement shall prevail. All express or implied agreements and understandings, either oral or written, heretofore made are expressly merged in and made a part of this Agreement. This Agreement may be amended, or any term hereof modified, only by a written instrument duly executed by the Parties hereto. Each of the Parties hereby acknowledges that this Agreement and the related documents are each the result of mutual negotiation and, therefore, any ambiguity in their respective terms shall not be construed against the drafting Party.

(b) The Confidentially Agreement between the Parties effective [* * *] shall survive and remain in full force and effect only with respect to any breaches thereof prior to the Effective Date of this Agreement.

11.6 Headings. The captions to the several Articles and Sections hereof and Schedules or Exhibits hereto are not a part of this Agreement, but are merely guides or labels to assist in locating and reading the several Articles and Sections hereof.

11.7 Third Party Beneficiaries. None of the provisions of this Agreement shall be for the benefit of or enforceable by any Third Party, including any creditor of either party. Except for an assignee in accordance with a permitted assignment of this Agreement, no Third Party shall obtain any right under any provision of this Agreement or shall by reason of any such provision make any claim in respect of any debt, liability or obligation (or otherwise) against either Party.

11.8 Independent Contractor. It is expressly agreed that GMI and Pfizer shall be independent contractors and that the relationship between the two Parties shall not constitute a partnership, joint venture or agency. Neither GMI nor Pfizer shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other, without the prior written consent of the other Party to do so.

11.9 Waivers. Any term or condition of this Agreement may be waived at any time by the Party that is entitled to the benefit thereof, but no such waiver shall be effective unless set forth in a written instrument duly executed by or on behalf of the Party or parties waiving such term or condition. Neither the waiver by either Party hereto of any right hereunder nor the failure to perform or of a breach by the other Party shall not be deemed or construed a waiver of

any other right hereunder or of any other breach or failure by said other Party whether of a similar nature or otherwise. All rights, remedies, undertakings, obligations and agreements contained in this Agreement shall be cumulative and none of them shall be a limitation of any other remedy, right, undertaking, obligation or agreement.

11.10 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be exchanged by electronic portable document format if mutually agreed by the Parties.

11.11 Other Actions. Each Party agrees to sign and execute such documents and to take such actions as reasonably requested by the other Party to carry out and perform the intent and purposes of the Party's obligations under this Agreement.

11.12 Severability. Each Party hereby agrees that it does not intend to violate any public policy, statutory or common laws, rules, regulations, treaty or decision of any government agency or executive body thereof of any country or community or association of countries. Should one or more provisions of this Agreement be or become invalid or unenforceable, the Parties hereto shall use their respective reasonable efforts to substitute, by mutual consent, valid provisions for such invalid provisions, if their economic effect, are sufficiently similar to the invalid provisions that it can be reasonably assumed that the Parties would have entered into this Agreement based on such valid provisions. In case such alternative provisions cannot be agreed upon, the invalidity of one or several provisions of this Agreement shall not affect the validity of this Agreement as a whole, unless the invalid provisions are of such essential importance to this Agreement that it is to be reasonably assumed that the Parties would not have entered into this Agreement without the invalid provisions.

11.13 Construction. Except where the context otherwise requires, wherever used, the singular will include the plural, the plural the singular, the use of any gender will be applicable to all genders, and the words "and/or" is used in the inclusive sense (one or more). The captions of this Agreement are for convenience of reference only and in no way define, describe, extend or limit the scope or intent of this Agreement or the intent of any provision contained in this Agreement. The term "including" as used herein means including, without limiting the

generality of any description preceding such term. The term “owned” or “owns” means solely owned or owns, or jointly owned or owns. References to “Section” or “Sections” or “Article” or “Articles” are references to the numbered Sections or Articles of this Agreement, unless expressly stated otherwise.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed and scaled by their respective duly authorized representatives as of the date first set forth above.

GLYCOMIMETICS, INC.	PFIZER INC.
By: /s/ Rachel K. King	By: /s/ Adam Woodrow
Name: Rachel K. King	Name: Adam Woodrow
Title: CEO	Title: Vice President Commercial Development

EXHIBIT A

GMI PATENT RIGHTS

Nation / Region	Application No. / Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

[* * *]

Nation / Region	Application No. / Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

[* * *]

Nation / Region	Application No. / Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

[* * *]

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Schedule 1.10

Backup Compounds

SEE NEXT PAGE

[* * *]

Schedule 1.35

Knowledge of GMI

PART A

Rachel K. King, President and Chief Executive Officer

John L. Magnani, Ph.D., Vice President and Chief Scientific Officer

Helen M. Thackray, M.D., FAAP, Vice President, Clinical Development

Brian Hahn, Director, Finance and Administration

PART B

[* * *]

[* * *]

Schedule 1.69

[* * *]

[See Attached]

[* * *]

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Schedule 2.1

Permitted Studies

Indication	Institution	Investigator(s)	Summary	Status
[* * *]	[* * *]	[* * *]	[* * *]	[* * *]

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Schedule 2.3

Transition Plan

[* * *]

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Schedule 3.1(c)

Ongoing Clinical Trial Budget

	Budget	To Date Jun-11	Remaining
[* * *]	[* * *]	[* * *]	[* * *]
[* * *]	[* * *]	[* * *]	[* * *]
[* * *]	[* * *]	[* * *]	[* * *]
	[* * *]	[* * *]	[* * *]

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Schedule 6.4

Public Announcement

PRESS RELEASE

DRAFT – NOT INTENDED FOR DISTRIBUTION

GlycoMimetics and Pfizer Enter into Licensing Agreement for Drug Candidate Currently in Development to Treat Patients Experiencing Vaso-occlusive Crisis Associated with Sickle Cell Disease

Gaithersburg, MD – October 11, 2011 – GlycoMimetics, Inc. announced today that it has entered into an exclusive worldwide licensing agreement with Pfizer Inc. (NYSE: PFE) for the GlycoMimetics investigational compound **GMI-1070**. GMI-1070 is a pan-selectin antagonist currently in Phase 2 development for the treatment of vaso-occlusive crisis associated with sickle cell disease. GMI-1070 has received Orphan Drug and Fast Track status from the U.S. Food and Drug Administration (FDA).

Vaso-occlusive crisis, which can last five to six days on average, results in over 75,000 hospitalizations each year in the U.S. These crises cause pain and tissue damage leading to multiple organ damage, a requirement for life-long narcotic pain medications, and eventually to significantly shorter life spans. While the genetic and molecular cause of sickle cell disease has been known for more than 50 years, therapy for painful crises has not significantly advanced. GMI-1070 is thought to inhibit selectin interactions, a key early step in the inflammatory process leading to vaso-occlusive crisis. In preclinical studies, GMI-1070 restored blood flow to affected vessels of sickle cell animals experiencing vaso-occlusive crisis.

“We are very pleased to partner with Pfizer for the advancement of GlycoMimetics’ lead drug candidate, GMI-1070, which is initially being evaluated in patients with sickle cell disease experiencing vaso-occlusive crisis. This is a major unmet medical need,” said **Rachel King, CEO of GlycoMimetics**. “We value the resources and experience that Pfizer brings to the program, and recognize that the agreement is an important validation of GlycoMimetics’ unique chemistry expertise in discovery of proprietary drug candidates.”

Under the terms of the agreement, Pfizer will receive an exclusive worldwide license to GMI-1070 for vaso-occlusive crisis associated with sickle cell disease and for other diseases for which the drug candidate may be developed. GlycoMimetics will remain responsible for completion of the ongoing Phase 2 trial under Pfizer’s oversight, and Pfizer will then assume all further development and commercialization responsibilities. The potential value of the agreement for GlycoMimetics is approximately $340 million, including an upfront payment as well as development, regulatory and commercial milestones. GlycoMimetics is also eligible for royalties on any sales.

“Pfizer is committed to helping improve the lives of patients with rare diseases, and we see potential for GlycoMimetics’ GMI-1070 to be a significant advance in the treatment of vaso-occlusive crisis of sickle

cell disease," said Yvonne Greenstreet, senior vice president and head of the Medicines Development Group within Pfizer's Specialty Care business unit. "This experimental compound and partnership are emblematic of our strategy in rare disease, targeting areas of high unmet need to deliver improved patient outcomes."

"This partnership is an important milestone for GlycoMimetics as the company advances its clinical development program," added Jim Barrett, Ph.D., Chairman of the Board of GlycoMimetics and General Partner, New Enterprise Associates. "It's a testament to the progress made to date with GMI-1070, and will enhance continued development of this potential treatment for patients suffering from vasoocclusive crisis."

About GMI-1070

GMI-1070 is a rationally designed glycomimetic inhibitor of E-, P- and L-selectins that interferes in a key early step in the inflammatory process leading to leukocyte adhesion and recruitment to inflamed tissue. GMI-1070 has shown activity in several models of diseases in which leukocyte adhesion and activation play a key role.

GMI-1070 is initially being developed for the treatment of vaso-occlusive crisis associated with sickle cell disease. By inhibiting selectin interactions, GMI-1070 may be able to decrease the enhanced cell adhesion that results in vaso-occlusive crisis. In preclinical studies, GMI-1070 restored blood flow to affected vessels of sickle cell animals experiencing vaso-occlusive crisis. Two Phase 1 trials of GMI-1070 were successfully completed in the first quarter of 2009, with no serious adverse events reported. The program is currently in Phase 2 clinical testing. GMI-1070 is also being evaluated in preclinical studies for the treatment of other diseases, including hematologic malignancies, where selectin-mediated cell adhesion and migration is known to play a key role in the disease process.

Issued U.S. patents cover GMI-1070 with additional intellectual property issued and pending outside the U.S.

About Sickle Cell Disease and Vaso-Occlusive Crisis

Vaso-occlusive crisis is the main clinical feature of sickle cell disease, causing severe pain, often resulting in significant patient complications, and sometimes death. Currently, there are no mechanism-based therapies for treatment of vaso-occlusive crisis. Treatment consists primarily of supportive therapy in the form of hydration and pain control, typically requiring hospitalization for five to six days.

About GlycoMimetics, Inc.

GlycoMimetics is a privately held biotechnology company that capitalizes on advances in the field of glycobiology. The company uses rational design of small molecule drugs that mimic the functions of bioactive carbohydrates to develop new drug candidates. The company's initial focus is on therapeutics to treat orphan conditions in which inflammation and cell adhesion may play a key role. For additional information, please visit the company's website: www.glycomimetics.com.

# # #

MEDIA CONTACTS

GlycoMimetics:
Brian Hahn
Phone: 240-243-1207
Email Address: bhahn@glycomimetics.com

Schedule 7.1

Disclosure Schedules

[* * *]

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AMENDMENT NO. 1 TO LICENSE AGREEMENT

This AMENDMENT NO. 1 TO LICENSE AGREEMENT (the "First Amendment") is made and entered into as of November 17, 2011 by and between GLYCOMIMETICS, INC., a Delaware corporation having a place of business at 401 Professional Drive, Suite 250, Gaithersburg, Maryland 20879 ("GMI"), and PFIZER INC., a Delaware corporation having a place of business at 235 East 42nd Street, New York, New York 10017 ("Pfizer"). GMI and Pfizer are individually referred to as a "Party" or collectively as the "Parties".

WHEREAS, GMI and Pfizer are parties to a License Agreement dated as of October 7, 2011, (the "License Agreement");

WHEREAS, the Parties desire to amend the License Agreement by including therein certain patents and patent applications owned by GMI that were erroneously omitted from Exhibit A of the License Agreement; and

NOW, THEREFORE, in consideration of the mutual promises and agreement set forth herein, the Parties hereby agree as follows:

1. GMI and Pfizer agree that Exhibit A of the License Agreement is replaced by the Exhibit A attached hereto and the License Agreement is to be construed as if the replacement Exhibit A was attached thereto as of the Effective Date of such License Agreement. The representations and warranties of GMI under Article 7 of such License Agreement with respect to GMI Patent Rights of Exhibit A shall be deemed to have been and are made as of the Effective Date of such License Agreement, with respect to all of the patents and patent applications of such replacement Exhibit A.

2. This First Amendment amends the terms of the License Agreement as expressly provided above, and the License Agreement as so amended remains in full force and effect. Capitalized terms used but not defined herein shall have the meanings set forth in the License Agreement. The validity, performance, construction, and effect of this First Amendment shall be governed by and construed under the substantive laws of the State of New York, without regard to any choice of law principles that would dictate the application of the laws of another jurisdiction. This First Amendment may be executed in counterparts, all of which taken together shall be regarded as one and the same instrument.

IN WITNESS WHEREOF, the Parties have executed this First Amendment in duplicate originals by their proper officers as of the date specified above.

GLYCOMIMETICS, INC.

By: /s/ Rachel K. King
Name: Rachel K. King
Title: CEO
Date: Nov. 18, 2011

PFIZER INC.

By: /s/ Robert Bagdorf
Name: Robert Bagdorf, MD, MBA
Title: VP, Worldwide Business Development
Date: 11/17/2011

Exhibit A

GMI PATENT RIGHTS

Nation/Region	Application No. / Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

[* * *]

Nation/Region	Application No. / Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

[* * *]

Nation/Region	Application No. / Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

[* * *]

Nation/Region	Application No. / Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

[* * *]

Nation/Region	Application No. / Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

[* * *]

Nation/Region	Application No. / Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

[* * *]

AMENDMENT NO. 2 TO LICENSE AGREEMENT

This AMENDMENT NO. 2 TO LICENSE AGREEMENT (the "Second Amendment) is made and entered into as of December 1, 2012 by and between GLYCOMIMETICS, INC., a Delaware corporation having a place of business at 401 Professional Drive, Suite 250, Gaithersburg, Maryland 20879 ("GMI"), and PFIZER INC., a Delaware corporation having a place of business at 235 East 42nd Street, New York, New York 10017 ("Pfizer"). GMI and Pfizer are individually referred to as a "Party" or collectively as the "Parties".

WHEREAS, GMI and PFIZER are parties to a License Agreement dated as of October 7, 2011, (the "License Agreement") as amended, November 17, 2011 ("Amendment No. 1");

WHEREAS, the Parties desire to amend the License Agreement by including therein certain patents and patent applications owned by GMI that were erroneously omitted from Exhibit A of the License Agreement; and

WHEREAS, the Parties desire to amend the License Agreement by deleting the Topline Study Report template (Schedule 1.69 in the License Agreement) and replacing it in its entirety with the revised Top Line Report template attached hereto and made a part hereof; and

NOW, THEREFORE, in consideration of the mutual promises and agreement set forth herein, the Parties hereby agree as follows:

1. GMI and Pfizer agree that Exhibit A of the License Agreement is replaced by the Exhibit A attached hereto and the License Agreement is to be construed as if the replacement Exhibit A was attached thereto as of the Effective Date of such License Agreement. The representations and warranties of GMI under Article 7 of such License Agreement with respect to GMI Patent Rights of Exhibit A shall be deemed to have been made as of the Effective Date of such License Agreement, with respect to all of the patents and patent applications of such replacement Exhibit A.
2. GMI and Pfizer agree to delete in its entirety the Topline Study Report template as set forth in Schedule 1.69 (Format for Topline Study Report) of the License Agreement and replacing it with the Top Line Report template attached hereto and made a part hereof.
3. This Second Amendment amends the terms of the License Agreement, as amended, as expressly provided above, and the License Agreement as so amended remains in full force and effect. Capitalized terms used but not defined herein

shall have the meanings set forth in the License Agreement. The validity, performance, construction, and effect of this Second Amendment shall be governed by and construed under the substantive laws of the State of New York, without regard to any choice of law principles that would dictate the application of the laws of another jurisdiction. This Second Amendment may be executed in counterparts, all of which taken together shall be regarded as one and the same instrument.

IN WITNESS WHEREOF, the Parties have executed this Second Amendment in duplicate originals by their proper officers as of the date specified above.

GLYCOMIMETICS, INC.

By: /s/ Rachel K. King
Name: Rachel K. King
Title: CEO
Date: Dec. 14, 2012

PFIZER, INC.

By: /s/ Y. Greenstreet
Name: Y. Greenstreet
Title: SVV Development
Date: 12/06/12

Protocol GMI-1070-201
TOP LINE REPORT
[Schedule 1.69 TEMPLATE]

[* * *]

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Exhibit A

GMI PATENT RIGHTS

Nation/Region	Application No./Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

[* * *]

Nation/Region	Application No./Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

[* * *]

Nation/Region	Application No./Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

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Nation/Region	Application No./Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

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Nation/Region	Application No./Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

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Nation/Region	Application No./Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

[* * *]

Nation/Region	Application No./Patent No.	Filing Date	Status
[* * *]	[* * *]	[* * *]	[* * *]

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Exhibit 10.2

SECOND AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

THIS AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT (this "Agreement") is made and entered into as of the 20th day of October, 2009 by and among GlycoMimetics, Inc., a Delaware corporation (the "Company"), and the investors listed on Exhibit 1.01, as updated from time to time, hereto (the "Investors") and each Person who shall, after the date hereof, acquire shares of Series A-1 Preferred Stock of the Company pursuant to (A) the Purchase Agreement (as defined below) or (B) a transfer of shares of Restricted Stock (as defined below) wherein rights under this Agreement are validly assigned, and joins in and becomes a party to this Agreement by executing and delivering to the Company a counterpart signature page in the form attached hereto and who shall be listed on an updated Exhibit 1.01, each of which is also herein referred to as an "Investor" and collectively as the "Investors."

RECITALS

WHEREAS, the Company and certain of the Investors are parties to the Series A-1 Convertible Preferred Stock Purchase Agreement of even date herewith (the "Purchase Agreement;" such Investors, the "Series A-1 Investors");

WHEREAS, the Company and certain of the Investors are parties to that certain Amended and Restated Investor Rights Agreement dated as of June 19, 2006 (the "Prior Investor Rights Agreement");

WHEREAS, in order to induce the Series A-1 Investors to enter into the Purchase Agreement, and purchase shares of Series A-1 Convertible Preferred Stock, par value $0.001 per share (the "Series A-1 Preferred Stock," and together with any other shares of the Company's Preferred Stock issued after the date hereof, the "Preferred Shares"), immediately prior to execution of the Purchase Agreement and this Agreement, all outstanding shares of the Company's previously existing Series A Preferred Stock and Series B Preferred Stock converted into Common Stock (such Common Stock received upon conversion of such previously existing Series A Preferred Stock and Series B Preferred Stock, as detailed on Exhibit 1.01 attached hereto, the "Converted Shares"); and

WHEREAS, in order to induce the Series A-1 Investors to enter into the Purchase Agreement, and purchase shares of Series A-1 Convertible Preferred Stock thereunder, the parties hereto desire to amend and restate the Prior Investor Rights Agreement to read in its entirety as set forth in this Agreement.

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants and agreements hereinafter set forth, and for other good and valuable consideration, the receipt and sufficiency of which hereby are acknowledged, the parties hereby agree as follows:

1. Certain Definitions. As used in this Agreement, the following terms shall have the following respective meanings:

"Affiliate" shall mean, with respect to a Person, any other Person controlling, controlled by, or under common control or otherwise under common investment management with such Person; *provided, however* that, with respect to Anthem Capital II, L.P. ("Anthem"), the term "Affiliate" shall include the United States Small Business Administration and any third party approved by the Board of

Directors, with respect to Novartis Bioventures Ltd., the term "Affiliate" shall mean: (x) any direct or indirect subsidiary of Novartis AG, (y) any foundation sponsored by Novartis AG or its direct or indirect subsidiaries, and (z) any co-investment funds of Novartis, *provided* that such co-investment funds, which are (or will be) organized as limited partnerships, meet the following criteria: (i) the general partner of such limited partnership is a wholly owned direct or indirect subsidiary of Novartis AG; (ii) the general partner of such limited partnership manages any such co-investment fund; and (iii) the limited partners of the limited partnership are directors and/or employees of Novartis AG or its direct or indirect subsidiaries.

"Board of Directors" shall mean the board of directors of the Company as constituted from time to time.

"Code" shall mean the Internal Revenue Code of 1986, as amended from time to time.

"Commission" shall mean the Securities and Exchange Commission, or any other federal agency at the time administering the Securities Act.

"Common Stock" shall mean the Common Stock, $0.001 par value, of the Company, as constituted as of the date of this Agreement.

"Computer Programs" shall mean (i) any and all computer programs (consisting of sets of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result), and (ii) all associated data and compilations of data, regardless of their form or embodiment. "Computer Programs" shall include, without limitation, all source code, object code and natural language code therefor, all versions thereof, all screen displays and designs thereof, all component modules, all descriptions, flow-charts and other work product used to design, plan, organize and develop any of the foregoing, and all documentation, including without limitation user manuals and training materials, relating to any of the foregoing.

"Conversion Shares" shall mean shares of Common Stock issued or issuable upon conversion of the Preferred Shares.

"Exchange Act" shall mean the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"Intellectual Property Rights" shall mean all of the following: (i) patents, patent applications, patent disclosures and all related continuation, continuation-in-part, divisional, reissue, re-examination, utility, model, certificate of invention and design patents, patent applications, registrations and applications for registrations, (ii) trademarks, service marks, trade dress, logos, tradenames, service names and corporate names and registrations and applications for registration thereof, (iii) copyrights and registrations and applications for registration thereof, (iv) mask works and registrations and applications for registration thereof, (v) trade secrets and confidential business information, whether patentable or nonpatentable and whether or not reduced to practice, know-how, manufacturing and product processes and techniques, research and development information, copyrightable works, financial, marketing and business data, pricing and cost information, business and marketing plans and customer and supplier lists and information, (vi) Computer Programs, (vii) other proprietary rights relating to any of the foregoing (including without limitation associated goodwill and remedies against infringements thereof and rights of protection of an interest therein under the laws of all jurisdictions) and (viii) copies and tangible embodiments thereof.

"Key Employee" or "Key Employees" shall mean and include the President, chief executive officer, chief financial officer, chief operating officer, chief technology officer, vice presidents of operations, research, development, sales or marketing, or any other individual who performs a significant role in the operations of the Company or a Subsidiary as may be reasonably designated by the Board of Directors of the Company.

"Major Investor" shall mean any Investor who holds at least 1,000,000 Preferred Shares (as adjusted for stock splits, stock dividends, combinations, subdivisions, recapitalizations and similar events); for purposes of this definition, shares held by Affiliates of an Investor shall be aggregated for purposes of determining whether any Investor is a "Major Investor" under this Agreement.

"Material Adverse Change" shall mean a material adverse change in the business, operations, affairs, or financial condition of the Company.

"NEA" shall mean New Enterprise Associates 13, L.P.

"Person or Persons" shall mean an individual, corporation, partnership, joint venture, trust, or unincorporated organization, or a government or any agency or political subdivision thereof.

"Qualified Public Offering" shall mean a fully underwritten, firm commitment public offering pursuant to an effective registration under the Securities Act covering the offer and sale by the Company of its Common Stock in which the aggregate net proceeds to the Company equal or exceed $36,000,000, in which the price per share of such Common Stock equals or exceeds $3.80 per share (such price subject to adjustment in the event of any stock splits, stock dividends, combinations, subdivisions, reorganizations and similar events).

"Registration Expenses" shall mean the expenses so described in Section 8.

"Reserved Employee Shares" shall mean shares of Common Stock and options, warrants and other rights to acquire Common Stock, and Common Stock issued pursuant to such options, warrants and other rights (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like) issued or reserved for issuance under the Company's 2003 Stock Incentive Plan, as amended and as adopted and approved by the Board of Directors, not to exceed in the aggregate 4,829,003 shares of Common Stock (as appropriately adjusted in accordance with the Company's Amended and Restated Certificate of Incorporation and to reflect stock splits, stock dividends, combinations of shares and the like with respect to the Common Stock).

"Restated Certificate" shall mean the Company's Amended and Restated Certificate of Incorporation.

"Restricted Stock" shall mean (i) the Conversion Shares and any other shares of Common Stock acquired by any of the Investors after the date hereof and (ii) the Converted Shares, but excluding in either case any such shares which have been (a) registered under the Securities Act pursuant to an effective registration statement filed thereunder and disposed of in accordance with the registration statement covering them or (b) publicly sold pursuant to Rule 144 under the Securities Act.

"Securities Act" shall mean the Securities Act of 1933, as amended, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"Selling Expenses" shall mean the expenses so described in Section 8.

"Series A-1 Directors" shall mean the Company's directors designated by NEA pursuant to Section 5(ii)(b) of the Stockholders Agreement.

"Stockholders Agreement" shall mean the Second Amended and Restated Stockholders Agreement, of even date herewith, by and among the Company and the "Stockholders" (as defined therein).

"Subsidiary" or "Subsidiaries" shall mean any corporation, partnership, trust or other entity of which the Corporation and/or any of its other subsidiaries directly or indirectly owns at the time a majority of the outstanding shares of equity securities of such corporation, partnership, trust or other entity.

2. Restrictive Legend. Each certificate representing Preferred Shares, Conversion Shares or Restricted Stock shall, except as otherwise provided in this Section 2 or in Section 3, be stamped or otherwise imprinted with a legend substantially in the following form (in addition to any legends required under applicable state securities laws or regulations):

> "THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 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 AND APPLICABLE STATE SECURITIES LAWS, OR UNLESS THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL OR OTHER EVIDENCE REASONABLY SATISFACTORY TO THE COMPANY WITH RESPECT TO THE AVAILABILITY OF AN EXEMPTION FROM THE REGISTRATION PROVISIONS OF THE SECURITIES ACT OF 1933 AND APPLICABLE STATE SECURITIES LAWS. THE VOTING RIGHTS WITH RESPECT TO, AND SALE OR OTHER DISPOSITION OF, THE SECURITIES REPRESENTED BY THIS CERTIFICATE ARE RESTRICTED BY AND SUBJECT TO THE PROVISIONS OF A SECOND AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT DATED AS OF OCTOBER 20**,** 2009 AS AMENDED FROM TIME TO TIME. A COPY OF WHICH IS AVAILABLE FOR INSPECTION AT THE OFFICES OF THE COMPANY."

A certificate shall not bear such legend immediately prior to, and following, any disposition of securities pursuant to Sections 4, 5, or 6 or in any case where such legend is determined not to be required under Section 3 hereof.

3. Notice of Proposed Transfer. Prior to any proposed transfer of any Preferred Shares, Conversion Shares or Restricted Stock (other than under the circumstances described in Sections 4, 5

or 6 hereof), the holder thereof shall give written notice to the Company of its intention to effect such transfer. Each such notice shall describe the manner of the proposed transfer and, if requested by the Company, shall be accompanied by an opinion of counsel reasonably satisfactory to the Company (it being agreed that Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP shall be satisfactory counsel) or other evidence reasonably satisfactory to the Company to the effect that the proposed transfer may be effected without registration under the Securities Act and any applicable state securities laws (it being understood that no such evidence shall be required with respect to any transfer made to one or more partners, members or Affiliates of the transferor), whereupon (subject to the other provisions of this Section 3) the holder of such stock shall be entitled to transfer such stock in accordance with the terms of its notice. Each certificate for Preferred Shares, Conversion Shares or Restricted Stock transferred as above provided shall bear the legend set forth in Section 2, except that such certificate shall not bear such legend if (i) such transfer is in accordance with the provisions of Rule 144 (or any other rule permitting public sale without registration under the Securities Act) or (ii) the opinion of counsel referred to above is to the further effect that the transferee and any subsequent transferee (other than an affiliate of the Company) would be entitled to transfer such securities in a public sale without registration under the Securities Act. Any transferee of stock for which a legend is required to be borne pursuant to the preceding sentence shall, as a condition to such transfer, execute and deliver to the Company a representation letter in form and substance reasonably satisfactory to the Company's counsel to the effect that the transferee is acquiring such stock for its own account, for investment purposes and not with a view to the distribution thereof.

4. Required Registration.

(a) Subject to Section 4(b) below, at any time after the earlier of the third anniversary of the date of this Agreement or six months after the closing of an initial public offering, the holders of Restricted Stock constituting at least 40% in interest of the Conversion Shares then outstanding may request the Company to register under the Securities Act all or any portion of the Restricted Stock (but not less than an amount of Restricted Stock that would result in an anticipated aggregate offering price, net of selling expenses, of ten million dollars ($10,000,000)) for sale in the manner specified in such notice. Notwithstanding anything to the contrary contained herein, no request may be made under this Section 4 within 180 days after the effective date of any registration statement on Form S-1 filed by the Company. All registration pursuant to this Section 4(a) are referred to herein as "Demand Registrations."

(b) Following receipt of any notice under this Section 4, the Company shall immediately notify all holders of Restricted Stock and Preferred Shares from whom notice has not been received and such holders shall then be entitled within 30 days thereafter to request the Company to include in the requested registration all or any portion of their shares of Restricted Stock. The Company shall use its reasonable best efforts to register under the Securities Act, for public sale in accordance with the method of disposition described in paragraph (a) above, the number of shares of Restricted Stock specified in such notice (and in all notices received by the Company from other holders within 30 days after the giving of such notice by the Company). The Company shall not be obligated to effect, or to take any action to effect, any registration of Restricted Stock pursuant to this Section 4 after the Company has effected registrations on two occasions pursuant to Section 4(a) and such registrations have been declared or ordered effective; *provided*, *however*, that a registration shall be deemed to be effected only when a registration statement covering at least 85% of the shares of Conversion Shares specified in notices received as aforesaid for sale in accordance with the method of disposition specified by the requesting holders shall have become effective or if such registration

statement has been withdrawn prior to the consummation of the offering at the request of the holders of a majority of the Conversion Shares to be registered pursuant thereto (other than as a result of a Material Adverse Change).

(c) The Company shall be entitled to include in any registration statement referred to in this Section 4 shares of Common Stock to be sold by the Company for its own account, except as and to the extent that, in the opinion of the managing underwriter, such inclusion would adversely affect the marketing of the Restricted Stock to be sold. Except for registration statements on Form S-4 or registrations relating solely to employee benefit plans on Forms S-1 or S-8 or any successors thereto, the Company will not file with the Commission any other registration statement with respect to its Common Stock, whether for its own account or that of other stockholders, from the date of receipt of a notice from requesting holders requesting sale pursuant to an underwritten offering pursuant to this Section 4 until the completion of the period of distribution of the registration contemplated thereby.

(d) If in the opinion of the managing underwriter the inclusion of all of the Restricted Stock requested to be registered under this Section would adversely affect the marketing of such shares, shares to be sold by the holders of Restricted Stock, if any, shall be excluded only after any shares to be sold by the Company have been excluded.

(e) Unless the holders requesting a Demand Registration have been able to include all of the Restricted Stock requested by such holders in such Demand Registration, the Company shall not include in such Demand Registration any securities which are not Restricted Stock. If a Demand Registration is an underwritten offering and the managing underwriters advise the Company in writing that in their opinion the number of shares of Restricted Stock and, if permitted hereunder, other securities requested to be included in such registration exceeds the number which can be sold in an orderly manner in such offering within a price range reasonably acceptable to the holders of Conversion Shares making such Demand Registration, the Company shall include in such registration: (i) first, Conversion Shares pro rata among the holders of such Conversion Shares on the basis of the number of Conversion Shares owned by such holders, (ii) the Restricted Stock other than Conversion Shares, *pro rata* among the holders of such Restricted Stock other than Conversion Shares on the basis of the number of shares (other than Conversion Shares) owned by such holders, and (iii) third, securities for the Company's account and (iv) fourth, other securities which are not Restricted Stock requested to be included in such registration pursuant to contractual obligation rights, *pro rata* among the holders thereof on the basis of the number of their securities requested to be included therein.

5. Incidental Registration. If (but without obligation to do so) the Company at any time (other than pursuant to Section 4 or Section 6) proposes to register any of its securities under the Securities Act for sale to the public solely for cash, whether for its own account or for the account of other security holders or both (except with respect to registration statements relating solely to employee benefit plans on Forms S-1 or S-8, registration statements on Form S-4, or registration statements on another form not available for registering the Restricted Stock for sale to the public), each such time it will give written notice to all holders of outstanding Restricted Stock of its intention so to do. Upon the written request of any such holder, received by the Company within 30 days after the giving of any such notice by the Company, to register any of its Restricted Stock, the Company will use its reasonable best efforts to cause the Restricted Stock as to which registration shall have been so requested to be included in the securities to be covered by the registration statement proposed to be filed by the Company. In the event that any registration pursuant to this Section 5 shall be, in

whole or in part, an underwritten public offering, the number of shares of Restricted Stock to be included in such an underwriting may be reduced in accordance with Section 4(e) above if and to the extent that the managing underwriter shall be of the opinion that such inclusion would adversely affect the marketing of the securities to be sold by the Company therein, *provided, however*, that such number of shares of Restricted Stock shall not be reduced if any shares are to be included in such underwriting for the account of any person other than the Company or requesting holders of Restricted Stock, and *provided, further, however*, that in no event may less than 20% of the total number of shares of Common Stock to be included in such underwriting be made available for shares of Restricted Stock (except that in the case of the initial public offering only if the managing underwriter shall in good faith advise the holders proposing to distribute their securities through such underwriting that such level of participation would, in its opinion, materially adversely affect the offering price or its ability to complete the offering, in which case the number of shares of Restricted Stock included shall be further reduced to such number which, in the opinion of the managing underwriter, can be included in the registration and underwriting without such an effect).

6. Registration on Form S-3. If at any time (i) a holder or holders of Restricted Stock then outstanding requests in writing that the Company file a registration statement on Form S-3 or any successor thereto for a public offering of all or any portion of the shares of Restricted Stock held by such requesting holder or holders, and (ii) the Company is a registrant entitled to use Form S-3 or any successor thereto to register such shares, then the Company shall use its reasonable best efforts to register under the Securities Act on Form S-3 or any successor thereto, for public sale in accordance with the method of disposition specified in such notice, the number of shares of Restricted Stock specified in such notice; *provided, however*, the Company shall not be required to effect any such registration, qualification or compliance pursuant to this Section 6 if (x) Form S-3 is not available for such offering by the holders of Restricted Stock; (y) the holders of Restricted Stock, together with the holders of any other securities of the Company entitled to inclusion in such registration, propose to sell Restricted Stock and other securities of less than $1,000,000; (z) the Company shall furnish to the holders of Restricted Stock a certificate signed by the President of the Company stating that, in the good faith judgment of the Board of Directors of the Company, it would be materially detrimental to the Company and its stockholders for such Form S-3 registration to be effected at such time, in which event the Company shall have the right to defer the filing of the Form S-3 registration statement for a period not more than 60 days after the receipt of the request of the holder or holders of Restricted Stock under this Section 6; *provided, however*, that the Company shall not defer more than two filings of the Form S-3 in any 12 month period; (xx) the Company has, within the 12 month period preceding the date of such request, already effected two registrations on Form S-3 for the holders of Restricted Stock pursuant to this Section 6, or (yy) in any particular jurisdiction in which the Company would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance. Whenever the Company is required by this Section 6 to use its reasonable best efforts to effect the registration of Restricted Stock, each of the procedures and requirements of Section 4 (including but not limited to the requirement that the Company notify all holders of Restricted Stock from whom notice has not been received and provide them with the opportunity to participate in the offering) shall apply to such registration.

7. Registration Procedures. If and whenever the Company is required by the provisions of Sections 4, 5 or 6 to use its reasonable best efforts to effect the registration of any shares of Restricted Stock under the Securities Act, the Company will, as expeditiously as possible:

(a) prepare and file with the Commission a registration statement (which, in the case of an initial public offering pursuant to Section 4, shall be on Form S-1 or other form of general applicability satisfactory to the managing underwriter selected as therein provided) with respect to such securities and use its reasonable best efforts to cause such registration statement to become and remain effective for the period of the distribution contemplated thereby (determined as hereinafter provided);

(b) prepare and file with the Commission such amendments and supplements to such registration statement and the prospectus used in connection therewith as may be necessary to keep such registration statement effective for the period specified in paragraph (a) above and comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such registration statement in accordance with the sellers' intended method of disposition set forth in such registration statement for such period;

(c) furnish to each seller of Restricted Stock and to each underwriter such number of copies of the registration statement and the prospectus included therein (including each preliminary prospectus) as such persons reasonably may request in order to facilitate the public sale or other disposition of the Restricted Stock covered by such registration statement;

(d) use its best efforts to register or qualify the Restricted Stock covered by such registration statement under the securities or "blue sky" laws of such jurisdictions as the sellers of Restricted Stock or, in the case of an underwritten public offering, the managing underwriter shall reasonably request, *provided*, *however*, that the Company shall not for any such purpose be required to qualify to transact business as a foreign corporation in any jurisdiction where it is not so qualified or to consent to general service of process in any such jurisdiction;

(e) use its reasonable best efforts to list the Restricted Stock covered by such registration statement with any securities exchange or national quotation system on which the Common Stock of the Company is then listed;

(f) provide a transfer agent and registrar, as well as a CUSIP number, for all such Restricted Stock, not later than the effective date of such registration statement;

(g) notify each seller of Restricted Stock and each underwriter under such registration statement, at any time when a prospectus relating thereto is required to be delivered under the Securities Act, of the happening of any event of which the Company has knowledge as a result of which the prospectus contained in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing;

(h) if the offering is underwritten and at the request of any seller of Restricted Stock, use its best efforts to furnish on the date that Restricted Stock is delivered to the underwriters for sale pursuant to such registration: (i) an opinion, dated such date, of counsel representing the Company for the purposes of such registration, in form and substance as is customarily given to underwriters in an underwritten public offering, addressed to the underwriters and to such seller, and (ii) a letter dated such date, from the independent public accountants of the Company, addressed to the underwriters and to such seller, in a form and substance as is customarily given by independent public accountants to underwriters in an underwritten public offering;

(i) advise each selling holder of Restricted Stock, promptly after it shall receive notice or obtain knowledge thereof, of the issuance of any stop order by the Commission suspending the effectiveness of such registration statement or the initiation or threatening of any proceeding for such purpose and promptly use all reasonable efforts to prevent the issuance of any stop order or to obtain its withdrawal if such stop order should be issued;

(j) cooperate with the selling holders of Restricted Stock and the managing underwriters, if any, to facilitate the timely preparation and delivery of certificates representing Restricted Stock to be sold, such certificates to be in such denominations and registered in such names as such holders or the managing underwriters may request at least two business days prior to any sale of Restricted Stock; and

(k) permit any holder of Restricted Stock which holder, in the sole and exclusive judgment, exercised in good faith, of such holder, might be deemed to be a controlling person of the Company, to participate in good faith in the preparation of such registration or comparable statement and to require the insertion therein of material, furnished to the Company in writing, which in the reasonable judgment of such holder and its counsel should be included, subject to review by the Company and its counsel after consultation with such holder.

For purposes of Sections 7(a) and 7(b) and of Section 4(c), the period of distribution of Restricted Stock in an initial public offering shall be deemed to extend until each underwriter has completed the distribution of all securities purchased by it, and the period of distribution of Restricted Stock in any other registration shall be deemed to extend until the earlier of the sale of all Restricted Stock covered thereby or 120 days after the effective date thereof.

It shall be a condition precedent to the obligations of the Company to take any action pursuant to Sections 4, 5, 6 or 7 with respect to Restricted Stock of any selling holder that such holder furnish to the Company in writing such information regarding itself, the Restricted Stock held by it, and the proposed method of distribution of such securities as shall be necessary to comply with all applicable federal and applicable state securities laws. The Company shall have no obligation with respect to any registration required pursuant to Sections 4 or 6 if the number of shares or the anticipated aggregate offering price of the Restricted Stock to be included in the registration does not equal or exceed the number of shares or the anticipated aggregate offering price required to originally trigger the Company's obligation to initiate such registration under Sections 4 or 6, whichever is applicable.

In connection with each registration pursuant to Sections 4, 5 or 6 covering an underwritten public offering, the Company and each seller agree to enter into a written agreement with the managing underwriter selected in the manner herein provided in such form and containing such provisions as are customary in the securities business for such an arrangement between such underwriter and companies of the Company's size and investment stature.

No Investor 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 7.

8. Expenses. All expenses incurred by the Company in complying with Sections 4, 5 and 6, including, without limitation, all registration and filing fees, printing expenses, fees and

disbursements of counsel and independent public accountants for the Company, fees and expenses (including counsel fees) incurred in connection with complying with state securities or "blue sky" laws, fees of the National Association of Securities Dealers, Inc., transfer taxes, fees of transfer agents and registrars, costs of insurance, and reasonable fees and disbursements of one counsel for the sellers of Restricted Stock, but excluding any Selling Expenses, are called "Registration Expenses." All underwriting discounts and selling commissions applicable to the sale of Restricted Stock are called "Selling Expenses."

The Company will pay all Registration Expenses in connection with each registration statement under Sections 4, 5 or 6. All Selling Expenses in connection with each registration statement under Sections 4, 5 or 6 shall be borne by the participating sellers in proportion to the number of shares sold by each, or by such participating sellers other than the Company (except to the extent the Company shall be a seller) as they may agree.

9. Indemnification and Contribution.

(a) In the event of a registration of any of the Restricted Stock under the Securities Act pursuant to Sections 4, 5 or 6, the Company, to the extent permitted by law, will indemnify and hold harmless each seller of such Restricted Stock thereunder, each underwriter of such Restricted Stock thereunder and each other person, if any, who "controls" such seller or underwriter (within the meaning of the Securities Act) against any losses, claims, damages or liabilities, joint or several, to which such seller, underwriter or controlling person may become subject under the Securities Act, the Exchange Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in any registration statement under which such Restricted Stock was registered under the Securities Act pursuant to Sections 4, 5 or 6, any preliminary prospectus or final prospectus contained therein, or any amendment or supplement thereof, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse each such seller, each such underwriter and each such controlling person for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action, *provided, however*, that the Company: (x) will not be liable in any such case if and to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission so made in conformity with information furnished by any such seller, any such underwriter or any such controlling person in writing specifically for use in such registration statement or prospectus or (y) will not be liable for any amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld or delayed).

(b) In the event of a registration of any of the Restricted Stock under the Securities Act pursuant to Sections 4, 5 or 6, each seller of such Restricted Stock thereunder, severally and not jointly, will, to the extent permitted by law, indemnify and hold harmless the Company, each person, if any, who "controls" the Company (within the meaning of the Securities Act), each officer of the Company who signs the registration statement, each director of the Company, each underwriter and each person who "controls" any underwriter (within the meaning of the Securities Act), against all losses, claims, damages or liabilities, joint or several, to which the Company or such officer, director, underwriter or controlling person may become subject under the Securities Act, the Exchange Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out

of or are based upon any untrue statement or alleged untrue statement of any material fact contained in the registration statement under which such Restricted Stock was registered under the Securities Act pursuant to Sections 4, 5 or 6, any preliminary prospectus or final prospectus contained therein, or any amendment or supplement thereof, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse the Company and each such officer, director, underwriter and controlling person for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action, *provided*, *however*, that such seller will be liable hereunder in any such case if and only to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in reliance upon and in conformity with information pertaining to such seller, as such, furnished in writing to the Company by such seller specifically for use in such registration statement or prospectus, and *provided*, *further*, *however*, that the liability of each seller hereunder shall be limited to the proportion of any such loss, claim, damage, liability or expense which is equal to the proportion that the public offering price of the shares sold by such seller under such registration statement bears to the total public offering price of all securities sold thereunder, but not in any event to exceed the net proceeds received by such seller from the sale of Restricted Stock covered by such registration statement.

(c) Promptly after receipt by an indemnified party hereunder of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party hereunder, notify the indemnifying party in writing thereof, but the omission so to notify the indemnifying party shall not relieve it from any liability which it may have to such indemnified party other than under this Section 9 and shall only relieve it from any liability which it may have to such indemnified party under this Section 9 if and to the extent the indemnifying party is prejudiced by such omission. In case any such action shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate in and, to the extent it shall wish, to assume and undertake the defense thereof with counsel reasonably satisfactory to such indemnified party, and, after notice from the indemnifying party to such indemnified party of its election so to assume and undertake the defense thereof, the indemnifying party shall not be liable to such indemnified party under this Section 9 for any legal expenses subsequently incurred by such indemnified party in connection with the defense thereof other than reasonable costs of investigation and of liaison with counsel so selected, *provided*, *however*, that, if the defendants in any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that there may be reasonable defenses available to it which are different from or additional to those available to the indemnifying party or if the interests of the indemnified party reasonably may be deemed to conflict with the interests of the indemnifying party, the indemnified party shall have the right to select a separate counsel and to assume such legal defenses and otherwise to participate in the defense of such action, with the expenses and fees of such separate counsel and other expenses related to such participation to be reimbursed by the indemnifying party as incurred.

(d) In order to provide for just and equitable contribution to joint liability under the Securities Act in any case in which either (i) any holder of Restricted Stock exercising rights under this Agreement, or any controlling person of any such holder, makes a claim for indemnification pursuant to this Section 9 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 9

provides for indemnification in such case, or (ii) contribution under the Securities Act 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) to be required on the part of any such selling holder or any such controlling person in circumstances for which indemnification is provided under this Section 9; then, and in each such case, the Company and such holder will contribute to the aggregate losses, claims, damages or liabilities to which they may be subject (after contribution from others) in such proportion so that such holder is responsible for the portion represented by the percentage that the public offering price of its Restricted Stock offered by the registration statement bears to the public offering price of all securities offered by such registration statement, and the Company is responsible for the remaining portion; *provided*, *however*, that, in any such case, (A) no such holder will be required to contribute any amount in excess of the net proceeds received by such holder for the sale of Restricted Stock registered under such registration statement; and (B) no person or entity guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any person or entity who was not guilty of such fraudulent misrepresentation.

(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) The obligations of the Company and the Investors under this Section 9 shall survive the completion of any offering of Registrable Securities in a registration statement under this Section 9.

(g) It is expressly agreed that in accordance with Maryland law, as summarized in Opinion of the Maryland Attorney General No. 86-064 dated December 1, 1986, absent already available appropriations to fund indemnification or contribution obligations that may arise under this Section 9, any such obligations of the Maryland Department of Business and Economic Development ("DBED") are conditioned on the availability of appropriations for use by DBED at the time the indemnification or contribution obligations arise. Any such obligations are further limited to the extent of the State of Maryland's statutory waiver of its sovereign immunity.

10. Changes in Common Stock or Preferred Stock. If, and as often as, there is any change in the Common Stock or the Preferred Stock by way of a stock split, stock dividend, combination or reclassification, or through a merger, consolidation, reorganization or recapitalization, or by any other means, appropriate adjustment shall be made in the provisions hereof so that the rights and privileges granted hereby shall continue with respect to the Common Stock and the Preferred Stock as so changed.

11. Rule 144 Reporting. With a view to making available the benefits of certain rules and regulations of the Commission which may at any time permit the sale of the Restricted Stock to the public without registration, at all times after 90 days after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, the Company agrees to:

(a) make and keep public information available, as those terms are understood and defined in Rule 144 under the Securities Act;

(b) file with the Commission in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act; and

(c) furnish to each holder of Restricted Stock, so long as such holder owns Restricted Stock, forthwith upon request (i) a written statement by the Company that the Company has complied with the reporting requirements of such Rule 144, the Securities Act and the Exchange Act, (ii) a copy of the most recent annual or quarterly report of the Company, and (iii) such other reports and documents so filed by the Company as such holder may reasonably request in availing itself of any rule or regulation of the Commission allowing such holder to sell any Restricted Stock without registration.

12. Right of First Offer.

(a) Right of First Offer. The Company shall not issue, sell or exchange, agree or obligate itself to issue, sell or exchange, or reserve or set aside for issuance, sale or exchange, any (i) shares of Common Stock, (ii) any other equity security of the Company, (iii) any debt security of the Company (other than debt with no equity feature) including, without limitation, any debt security which by its terms is convertible into or exchangeable for any equity security of the Company, (iv) any security of the Company that is a combination of debt and equity, or (v) any option, warrant or other right to subscribe for, purchase or otherwise acquire any such equity security or any such debt security of the Company, unless in each case the Company shall have first offered to sell such securities (the "Offered Securities") to the Major Investors. Each time the Company proposes to offer the Offered Securities, the Company shall first make an offering of such Offered Securities to each Major Investor by delivering a notice by mail (the "Company Notice") to the Major Investors stating (i) its bona fide intention to offer such Offered Securities, (ii) the number of such shares of Offered Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such shares of Offered Securities. Upon delivery of the Company Notice, each Major Investor shall have the right to purchase (x) that portion of the Offered Securities as the number of shares of Restricted Stock then held by such Major Investor bears to the total number of shares of outstanding capital stock of the Company (assuming the exercise and conversion of all exercisable and convertible securities) (the "Basic Amount"), and (y) such additional portion of the Offered Securities as such Major Investor shall indicate it will purchase should any other Major Investor subscribe for less than its Basic Amount (the "Undersubscription Amount"), at a price and on such other terms as shall have been specified by the Company in writing delivered to such Major Investor (the "Offer"), which Offer by its terms shall remain open and irrevocable for a period of 20 days from receipt of the offer.

(b) Notice of Acceptance. Notice of each Major Investor's intention to accept, in whole or in part, any Offer made pursuant to Section 12(a) shall be evidenced by a writing signed by such Major Investor and delivered to the Company prior to the end of the 20-day period of such offer, setting forth such of the Major Investor Basic Amount as such Major Investor elects to purchase and, if such Major Investor shall elect to purchase all of its Basic Amount, such Undersubscription Amount as such Major Investor shall elect to purchase (the "Notice of Acceptance"). If the Basic Amounts subscribed for by all Major Investors are less than the total of the Major Investors' Basic Amounts (such difference, the "Available Undersubscription Amount"), then the Company shall promptly notify each Major Investor which purchases all the shares available to it of any other Major Investor's failure to do likewise, whereupon each Major Investor who has set forth Undersubscription Amounts in its Notice of Acceptance shall be entitled to purchase, in addition to the Basic Amounts subscribed for, all

Undersubscription Amounts it has subscribed for; *provided*, *however*, that should the Undersubscription Amounts subscribed for exceed the Available Undersubscription Amount, each Major Investor who has subscribed for any Undersubscription Amount shall be entitled to purchase only that portion of the Available Undersubscription Amount as the Undersubscription Amount subscribed for by such Major Investor bears to the total Undersubscription Amounts subscribed for by all Major Investors, subject to rounding by the Board of Directors to the extent it reasonably deems necessary.

(c) Conditions to Acceptances and Purchase.

(i) Permitted Sales of Refused Securities. In the event that Notices of Acceptance are not given by the Major Investors in respect of all the Offered Securities, the Company shall have ninety (90) days from the expiration of the period set forth in Section 12(a) to close the sale of all or any part of such Offered Securities as to which a Notice of Acceptance has not been given by the Major Investors (the "Refused Securities") to the Person or Persons specified in the Offer or any other Person or Persons, but only for cash and otherwise in all respects upon terms and conditions, including, without limitation, unit price and interest rates, which are no more favorable, in the aggregate, to such other Person or Persons or less favorable to the Company than those set forth in the Offer. If the Company does not enter into an agreement for all of the Refused Securities within such ninety (90) day period and if such agreement is not consummated within sixty (60) days thereafter, the rights provided under this Section 12 shall be deemed to be revived with respect to the Refused Shares not purchased and such unpurchased Refused Shares shall not be offered unless first reoffered to the Major Investors pursuant to this Section 12.

(ii) Closing. Upon the closing, which shall include full payment to the Company, of the sale to such other Person or Persons of all the Refused Securities, the Major Investors shall purchase from the Company, and the Company shall sell to the Major Investors, the number of Offered Securities determined pursuant to Section 12(a) and Section 12(b) and upon the terms and conditions specified in the Offer. The purchase by the Major Investors of any Offered Securities is subject in all cases to the preparation, execution and delivery by the Company and the Major Investors of a purchase agreement relating to such Offered Securities reasonably satisfactory in form and substance to the Major Investors and their respective counsel. Any Offered Securities not purchased by the Major Investors or other Person or Persons in accordance with this Section 12(c) may not be sold or otherwise disposed of until they are again offered to the Major Investors under the procedures specified in Sections 12(a), 12(b) and 12(c).

(d) Termination of Right of First Offer. The rights of the Major Investors under this Section 12 shall terminate immediately prior to, but subject to, the consummation of the Company's first firm commitment underwritten public offering of its Common Stock pursuant to the Securities Act (an "IPO"); *provided*, *however*, that the rights of the Investors pursuant to this Section 12 may be waived as to all of such Investors by the affirmative vote or written consent of holders of a majority in interest of the Conversion Shares held by Major Investors, and any such waiver shall be binding on all Investors, even if any of such Investors do not execute such waiver and irrespective of whether one or more Investors participates in the purchase of the Offered Securities.

(e) Exception. The rights of the Major Investors under this Section 12 shall not apply to:

(i) (a) Common Stock issued as a stock dividend to holders of Common Stock or upon any subdivision or combination of shares of Common Stock or (b) Preferred Stock issued as a dividend to holders of Preferred Stock upon any subdivision or combination of shares of Preferred Stock;

(ii) any Common Stock issued in connection with a Qualified Public Offering;

(iii) any Preferred Shares sold pursuant to the Purchase Agreement;

(iv) the Conversion Shares;

(v) any Reserved Employee Shares;

(vi) any securities issued pursuant to the acquisition of another bona fide commercial operating entity by the Company or any of its Subsidiaries by merger (whereby the Company or any of its Subsidiaries owns no less than 51% of the voting power of such corporation) or purchase by the Company or any of its Subsidiaries of all or substantially all of such entity's stock or assets, if such acquisition is approved by the Board of Directors;

(vii) any securities issued in connection with a strategic partnership, joint venture or other similar agreement (other than primarily for equity financing purposes), provided that such is approved by the Board of Directors;

(viii) any warrants to purchase Common Stock issued in connection with a bank loan or lease with a financial institution or the issuance of Common Stock upon the exercise of any such warrant (other than primarily for equity financing purposes) provided that such is approved by the Board of Directors;

(ix) any securities issued prior to the date hereof; or

(x) the issuance of securities pursuant to the conversion or exercise of convertible or exercisable securities either (a) issued prior to the date hereof or (b) if such original convertible or exercisable securities were subject to the provisions of this Section 12.

(f) Assignment. The right of first offer set forth in this Section 12 may not be assigned or transferred, except that such right is assignable by each Major Investor to any Affiliate of such Major Investor.

13. Covenants of the Company.

(a) Affirmative Covenants of the Company Other Than Reporting Requirements. Without limiting any other covenants and provisions hereof, and except to the extent the following covenants and provisions of this Section 13(a) are waived in any instance by the holders of at least a majority in interest of the Preferred Shares (voting together as a single class and not as separate series

and on an as-converted basis), the Company covenants and agrees that until the consummation of an IPO it will perform and observe the following covenants and provisions, and will cause each Subsidiary, if and when such Subsidiary exists, to perform and observe such of the following covenants and provisions as are applicable to such Subsidiary:

(i) Payment of Taxes and Trade Debt. Pay and discharge, and cause each Subsidiary to pay and discharge, all taxes, assessments and governmental charges or levies imposed upon it or upon its income, profits or business, or upon any properties belonging to it, prior to the date on which penalties attach thereto, and all lawful claims which, if unpaid, might become a lien or charge upon any properties of the Company or any Subsidiary; *provided*, *however*, that neither the Company nor any Subsidiary shall be required to pay any such tax, assessment, charge, levy or claim which is being contested in good faith and by appropriate proceedings if the Company or any Subsidiary shall have set aside on its books sufficient reserves, if any, with respect thereto. Pay and cause each Subsidiary to pay, when due, or in conformity with customary trade terms, all lease obligations, all other indebtedness incident to the operations of the Company or its Subsidiaries, except as such are being contested in good faith and by proper proceedings if the Company or Subsidiary concerned shall have set aside on its books sufficient reserves, if any, with respect thereto.

(ii) Maintenance of Insurance. The Company shall use its reasonable best efforts to maintain from responsible and reputable insurance companies or associations a term life insurance policy on the life of each of Rachel King and John Magnani (so long as each remains an employee of the Company), each policy to be in the amount of $2,000,000, the proceeds of which will be payable to the order of the Company. The Company shall maintain and cause each Subsidiary to obtain and maintain, insurance with responsible and reputable insurance companies or associations in such amounts and covering such risks as is customarily carried by similarly situated companies engaged in similar businesses and owning similar properties in the same general areas in which the Company or such Subsidiary operates (including Directors and Officers and Errors and Omissions insurance in amounts and on terms acceptable to the Series A-1 Directors), but in any event in amounts sufficient to prevent the Company or Subsidiary from becoming a co-insurer. Except as otherwise expressly provided herein, the Company will not cause or permit any assignment of the proceeds of any such insurance policy and will not borrow against any such policy. The Company will add NEA as a notice party to all policies and will request that the issuer(s) of any such policy provide such designees with at least 10 days' notice before such policy is terminated (for failure to pay premiums or otherwise) or assigned, or before any change is made in the designation of the beneficiary thereof.

(iii) Preservation of Corporate Existence. Preserve and maintain, and, unless the Company deems it not to be in its best interests, cause each Subsidiary to preserve and maintain, its corporate existence, rights, franchises and privileges in the jurisdiction of its incorporation, and qualify and remain qualified, and cause each Subsidiary to qualify and remain qualified, as a foreign corporation in each jurisdiction in which such qualification is necessary or desirable in view of its business and operations or the ownership or lease of its properties. The Company shall use its reasonable best efforts to secure, preserve and maintain, and cause each Subsidiary to secure, preserve and maintain, all licenses and other rights to use Intellectual Property Rights owned or possessed by it and deemed by the Company to be material and necessary to the conduct of its business and the businesses of its Subsidiaries, taken as a whole.

(iv) Compliance with Laws. Comply, and cause each Subsidiary to comply, with the requirements of all applicable laws, rules, regulations and orders of any governmental authority, where noncompliance would have a Material Adverse Change.

(v) Inspection. Permit, upon reasonable request and notice, each of the Major Investors or any agents or representatives thereof, provided that the Board of Directors has not reasonably determined that such Major Investor or any of its Affiliates is a competitor of the Company, to examine and make copies of and extracts from the books of account of, and visit and inspect the properties of the Company and any Subsidiary, to discuss the affairs, finances and accounts of the Company and any Subsidiary with any of its officers, directors or Key Employees and independent accountants, and consult with and advise the management of the Company and any Subsidiary as to their affairs, finances and accounts, all at reasonable times during normal business hours.

(vi) Confidentiality. Subject to the disclosure of information of a nontechnical nature, including financial information, which such Investor discloses to its partners and/or shareholders generally and informs such partners and/or shareholders of the confidential nature of such information and directs them to maintain the confidentiality thereof, each Investor agrees to use, and to use commercially reasonable efforts to ensure that its authorized representatives use, the same degree of care as such Investor uses to protect its own confidential information (but in no event less than reasonable care) to keep confidential any information furnished to it which the Company identifies as being proprietary or confidential except such information that (a) was in the public domain prior to the time it was furnished to such Investor, (b) is or becomes (through no action or inaction by any Investor) generally available to the public, (c) was in its possession or known by such Investor without restriction prior to receipt from the Company, (d) was rightfully disclosed to such Investor by a third party without restriction or (e) was independently developed without any use of, or reference to, the Company's confidential information. Notwithstanding the foregoing, each Investor that is a limited partnership that is a bona fide venture capital or private equity fund may disclose summary financial information or a summary overview of the Company's business (which overview shall not include any proprietary scientific or technical information) to any former partners who retained an economic interest in such Investor, and to any current or prospective partner, limited partner, general partner or management company of such Investor (or any employee or representative of any of the foregoing) (each of the foregoing persons, a "Permitted Disclosee") or legal counsel, accountants or representatives for such Investor or Permitted Disclosee, provided, however, that any Permitted Disclosee to whom Company confidential information is disclosed shall be subject to the confidentiality provisions of the operating agreements of such Investor (which shall provide that each Permitted Disclosee shall at least use reasonable care to keep confidential all such confidential information), which operating agreements obligate any such Permitted Disclosee to maintain the confidence of any such confidential information subject to certain exceptions (which are substantially similar to those contained in (a) through (e) above). Furthermore, nothing contained herein shall prevent any Investor or any Permitted Disclosee from (x) entering into any business, entering into any agreement with a third party, or investing in or engaging in investment discussions with any other company (whether or not competitive with the Company), provided that such Investor or Permitted Disclosee does not disclose or otherwise make use of any proprietary or confidential information of the Company in connection with such activities, or (y) making any disclosures required by law, rule, regulation or court or other governmental order, provided that the Company is given reasonable advance notice of such required disclosure, to the extent reasonably practicable, so that it can take steps (with the Investors' and Permitted Disclosees' reasonable cooperation) to prevent or mitigate such disclosure. Furthermore, DBED agrees that all of the Confidential Information and General

Information constitutes a “trade secret”, “confidential commercial information”, and/or “confidential financial information” for purposes of Section 10-617 of the State Government Article of the Annotated Code of Maryland, as amended (“Exempt PIA Information”). DBED shall, within 5 business days of receipt, return to the Company any Confidential Information, including any copies thereof or notes regarding such information in whatever form or media, that DBED does not believe in good faith qualifies as Exempt PIA Information.

(vii) Keeping of Records and Books of Account. Keep, and cause each Subsidiary to keep, adequate records and books of account in which true and complete entries will be made in accordance with generally accepted accounting principles (“GAAP”) consistently applied, reflecting all financial transactions of the Company and any Subsidiary, and including, for each fiscal year, adequate reserves in accordance with GAAP for depreciation, depletion, returns of merchandise, obsolescence, amortization, taxes, and bad debts.

(viii) Maintenance of Properties. Maintain and preserve, and cause each Subsidiary to maintain and preserve, all of its properties and assets, necessary for the proper conduct of its business, in good repair, working order and condition, ordinary wear and tear excepted.

(ix) Budgets Approval. Not later than 30 days prior to the commencement of each fiscal year, prepare and submit to, and obtain the approval of the Board of Directors of, a business plan and monthly operating budgets in detail for the upcoming fiscal year, including capital and operating expense budgets, cash flow projections and profit and loss projections, all itemized in reasonable detail (including itemization of provisions for officers’ compensation). Review the budget and business plan periodically, and resubmit all changes therein and all material deviations therefrom to the Board of Directors. The Company shall not enter into any activity not in the ordinary course of business and not envisioned by the budget and business plan, unless approved by the Board of Directors.

(x) Financings. Inform the Board of Directors of any negotiations, offers or contracts relating to possible financings of any nature for the Company, whether initiated by the Company or any other Person, except for (A) arrangements with trade creditors, and (B) utilization by the Company or any Subsidiary of commercial lending arrangements with financial institutions.

(xi) By-laws. At all times, cause the bylaws of the Company (or the Restated Certificate) to provide that, unless otherwise required by the laws of the State of Delaware, (i) any two directors and (ii) any holder or holders of at least 25% of the outstanding Preferred Shares, shall have the right to call a meeting of the Board of Directors or stockholders. At all times maintain provisions in the bylaws of the Company or the Restated Certificate indemnifying all directors against liability to the maximum extent permitted under the laws of State of Delaware.

(xii) Compliance Agreements. The Company will maintain a duly executed Compliance Agreement (which will endure for a minimum of one year) in a form as adopted by the Board of Directors with Rachel King and John Magnani and maintain a commercially reasonable confidentiality and assignment of inventions agreement containing customary terms approved by the Board of Directors with each other employee of the Company and each other independent contractor who has access to the Company’s confidential information.

(xiii) New Developments. Cause all officers and Key Employees and, to the best of the Company's or any Subsidiary's ability, consultants of the Company or any Subsidiary, to execute Nondisclosure and Developments Agreements in a form as adopted by the Board of Directors in favor of the Company or any Subsidiary (or, in the case of consultants in such form and substance as is deemed commercially reasonable by the Key Employee) and, where possible and deemed by management to be commercially appropriate based on the advice of legal counsel and other considerations, to file and prosecute United States and foreign patent or copyright applications relating to and protecting such developments on behalf of the Company or any Subsidiary.

(xiv) Meetings of Directors. Hold meetings of the Company's Board of Directors not less than four (4) times a year on a quarterly basis.

(xv) Expenses of Directors. Promptly reimburse in full, each director of the Company who is not an employee of the Company for all of his reasonable out-of-pocket documented expenses incurred in attending each meeting of the Board of Directors of the Company or any committee thereof.

(xvi) Conflicts of Interest. Use commercially reasonable efforts to cause its officers and Key Employees to devote their primary productive time, ability and attention to the business of the Company.

(xvii) Stock Option Plans and Awards. All stock option plans or stock purchase agreements involving employees, directors or consultants of the Company adopted by the Company from time to time shall provide that each option granted or restricted stock purchased thereunder shall vest (A) with respect to 25% of the shares subject to such grant or purchase, one year after the date of such grant or purchase and (B) with respect to the remaining shares subject to such grant or purchase, in equal monthly installments over a period of three years thereafter unless otherwise approved by the affirmative vote of (x) the Board of Directors, or (y) the Compensation Committee of the Board of Directors (which Compensation Committee shall at all times be comprised of at least one of the Series A-1 Directors).

(xviii) Qualified Small Business Stock. Use reasonable efforts to ensure that the Restricted Stock will meet each of the requirements for qualification as "qualified small business stock" set forth in Section 1202(c) of the Code. Submit to the Company's stockholders (including the Investors) and to the Internal Revenue Service any reports that may reasonably be required under Section 1202(d)(1)(C) of the Code and the regulations promulgated thereunder. In addition, within 10 days after any Investor's written request therefor, deliver to such Investor information in the Company's possession which is reasonably requested by such Investor to enable such Investor to determine whether such Investor's interest in the Company constitutes "qualified small business stock" as defined in Section 1202(c) of the Code.

(xix) Real Property Holding Corporation. The Company shall provide prompt notice to NEA following any "determination date" (as defined in Treasury Regulation Section 1.897-2(c)(1)) on which the Company becomes a United States real property holding corporation. In addition, upon a written request by NEA, the Company shall provide NEA with a written statement informing NEA whether NEA's (or its Affiliates) interest in the Company constitutes a United States real property interest. The Company's determination shall comply with the requirements of Treasury Regulation Section 1.897-2(h)(1) or any successor regulation, and the Company shall provide timely

notice to the Internal Revenue Service, in accordance with and to the extent required by Treasury Regulation Section 1.897-2(h)(2) or any successor regulation, that such statement has been made. The Company's written statement to NEA shall be delivered to NEA within 10 days of NEA's written request therefor. The Company's obligation to furnish such written statement shall continue notwithstanding the fact that a class of the Company's stock may be regularly traded on an established securities market or the fact that there is no preferred stock then outstanding.

(xx) Indemnification Matters. The Company hereby acknowledges that one (1) or more of the directors nominated to serve on the Board of Directors by the Investors (each a "Fund Director") may have certain rights to indemnification, advancement of expenses and/or insurance provided by one or more of the Investors and certain of their affiliates (collectively, the "Fund Indemnitors"). The Company hereby agrees (a) that it is the indemnitor of first resort (i.e., its obligations to any such Fund Director are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such Fund Director are secondary), (b) that it shall be required to advance expenses incurred by such Fund Director pursuant to the Indemnification Agreement between such Fund Director and the Company (the "Indemnification Agreement"), and shall, to the extent provided in the Indemnification Agreement, be liable for all expenses, judgments, penalties, fines and amounts paid in settlement by or behalf of any such Fund Director to the extent legally permitted and as required by the Restated Certificate or the bylaws of the Company (or the Indemnification Agreement), without regard to any rights such Fund Director may have against the Fund Indemnitors, and, (c) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of any such Fund Director with respect to any claim for which such Fund Director has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Fund Director against the Company.

(b) Negative Covenants of the Company. Without limiting any other covenants and provisions hereof, the Company covenants and agrees that, until the consummation of a Qualified Public Offering or, while this Agreement remains outstanding, it will comply with and observe the following covenants and provisions, and will cause each Subsidiary, if and when such Subsidiary exists, to comply with and observe such of the following covenants and provisions as are applicable to such Subsidiary, and will not, without the written consent or waiver of the holders of at least a majority in interest of the holders of the Preferred Shares (voting together as a single class and not as separate series and on an as-converted basis):

(i) Assumptions or Guaranties of Indebtedness of Other Persons. Assume, guarantee, endorse or otherwise become directly or contingently liable on, or permit any Subsidiary to assume, guarantee, endorse or otherwise become directly or contingently liable on (including, without limitation, liability by way of agreement, contingent or otherwise, to purchase, to provide funds for payment, to supply funds to or otherwise invest in the debtor or otherwise to assure the creditor against loss) any indebtedness of any other Person, except for trade accounts of the Company or any Subsidiary arising in the ordinary course of business.

(ii) Change in Nature of Business. Except as authorized by the Board of Directors, make or permit any Subsidiary to make, any material change in the nature of its business as contemplated in written materials delivered to the Investors prior to the date hereof.

(iii) Ownership of Subsidiaries. Except as authorized by the Board of Directors, purchase or hold beneficially any stock, other securities or evidences of Indebtedness in, or make any investment in any other Person, excluding a wholly-owned Subsidiary of the Company, if the aggregate financial commitment of the Company related to all such commitments involves more than $10,000 in any 12-month period.

(iv) Issuance of Reserved Employee Shares. Grant to any of its employees options or other rights to purchase Reserved Employee Shares unless authorized by the Company's Board of Directors or its Compensation Committee (which Compensation Committee shall at all times be comprised of at least one of the Series A-1 Directors).

(v) Dealings with Affiliates and Others. Other than as contemplated by this Agreement or as set forth in Section 4.09 of the Schedule of Exceptions to the Purchase Agreement as delivered at the Closing (as defined in the Purchase Agreement), other than transactions in the ordinary course of business involving less than $25,000, enter into, after the date of this Agreement, any transaction, including, without limitation, any loans or extensions of credit or royalty agreements, with any officer, director or affiliate of the Company or any Subsidiary or any member of their respective immediate families or any corporation or other entity directly or indirectly affiliated with one or more of such officers, directors or members of their immediate families unless such transaction is approved in advance by the disinterested members of the Board of Directors; *provided*, *however*, that the Company shall not enter into any transaction with any officer or director of the Company (or any of their respective affiliates) unless such transaction is also approved in advance by the disinterested Board of Directors.

(vi) Maintenance of Ownership of Subsidiaries. Sell or otherwise dispose of any shares of capital stock of any Subsidiary, except to another Subsidiary, or permit any Subsidiary to issue, sell or otherwise dispose of any shares of its capital stock or the capital stock of any Subsidiary, except to the Company or another Subsidiary; *provided*, *however*, that the Company may liquidate, merge or consolidate any Subsidiary or Subsidiaries into or with itself, provided that the Company is the surviving entity, or into or with another Subsidiary or Subsidiaries.

(vii) Transfers of Technology. Transfer any ownership or interest in, or material rights relating to, any of its material Intellectual Property Rights to any Person or entity which is not a member of the consolidated group of the Company and its Subsidiaries; *provided*, *however*, that this Section shall not apply to transfers of Intellectual Property Rights accomplished in the ordinary course of business.

(viii) GlycoTech Agreements. Waive any of its material rights under any agreements with GlycoTech Corporation (together, the "GTC Agreements") or relieve any other parties to such agreements of any of their material obligations to the Company under the GTC Agreements.

(ix) Agreements with Key Employees. Amend any material provision of or waive any of its material rights under any agreement with any officer or Key Employee of the Company, except to the extent approved by the Board of Directors.

(c) Reporting Requirements. As long as an Investor holds at least 1,000,000 Preferred Shares (as adjusted for stock splits, stock dividends, combinations, subdivisions, recapitalizations and similar events) or until the consummation of an IPO, such Investor shall be entitled to receive the following from the Company; provided, that the Board of Directors has not reasonably determined that such Investor or any of its Affiliates is a competitor of the Company:

(i) Monthly Reports: as soon as available and in any event within 30 days after the end of each calendar month, unaudited financial statements of the Company and its Subsidiaries as of the end of such month and statements of income and retained earnings of the Company and its Subsidiaries for such month and for the period commencing at the end of the previous fiscal year and ending with the end of such month, setting forth in each case in comparative form the corresponding figures for the corresponding period of the preceding fiscal year, and including comparisons to monthly budgets, and a cash flow analysis for such month, all in reasonable detail;

(ii) Quarterly Reports: as soon as available and in any event within 45 days after the end of each of the first three quarters of each fiscal year of the Company, financial statements of the Company and its Subsidiaries as of the end of such quarter and statements of income and cash flows of the Company and its Subsidiaries for such quarter and for the period commencing at the end of the previous fiscal year and ending with the end of such quarter, setting forth in each case in comparative form the corresponding figures for the corresponding period of the preceding fiscal year, and including comparisons to quarterly budgets and a summary discussion of the Company's principal functional areas, all in reasonable detail and duly certified by the chief financial officer of the Company as having been prepared in accordance with generally accepted accounting principles consistently applied (subject to year-end audit adjustments);

(iii) Annual Reports: as soon as available and in any event within 90 days after the end of each fiscal year of the Company, a copy of the annual audit report for such year for the Company and its Subsidiaries, including therein consolidated balance sheets of the Company and its Subsidiaries as of the end of such fiscal year and consolidated statements of income and of the Company and its Subsidiaries for such fiscal year, setting forth in each case in comparative form the corresponding figures for the preceding fiscal year, all such consolidated statements to be duly certified by the chief financial officer of the Company and by such independent public accountants of recognized national standing approved by the Board of Directors;

(iv) Budgets: as soon as available after approval by the Board of Directors and in any event no later than 30 days prior to the end of each fiscal year of the Company, a business plan and monthly operating budgets for the forthcoming fiscal year;

(v) Notice of Adverse Changes: promptly after the occurrence thereof and in any event within 10 business days after each occurrence, notice of any Material Adverse Change in the operations or financial condition of the Company or any material default in any other material agreement to which the Company is a party;

(vi) Written Reports: promptly upon receipt or publication thereof, any written reports submitted to the Company by independent public accountants in connection with an annual or interim audit of the books of the Company and its Subsidiaries made by such accountants or by consultants or other experts in connection with such consultant's or other expert's review of the Company's operations or industry, and written reports prepared by the Company to comply with other investment or loan agreements;

(vii) Notice of Proceedings: promptly after the commencement thereof, notice of all actions, suits, litigations and proceedings pending or, to the knowledge of the Company, threatened against the Company affecting any of its respective properties or assets, or against any officer or director of the Company or, to the knowledge of the Company, any Key Employee or holder of more than 5% of the capital stock of the Company, relating to such person's performance of duties for the Company or relating to his, her or its stock ownership in the Company or otherwise relating to the business of the Company including, without limiting their generality, actions pending of which the Company is a party or, to the knowledge of the Company, threatened involving the prior employment of any of the Company's officers or Key Employees in their use in connection with the Company's business of any information or techniques allegedly proprietary to any of their former employees;

(viii) Stockholders' and SEC Reports: promptly upon sending, making available, or filing the same, such reports and financial statements as the Company or any Subsidiary shall send or make available to the stockholders of the Company or file with the Commission; and

(ix) Other Information: such other information respecting the business, properties or the condition or operations, financial or other, of the Company or any of its Subsidiaries as any such Investor may from time to time reasonably request.

(d) Genzyme. For the avoidance of doubt, as of the date of this Agreement, Genzyme Corporation shall not be considered a competitor to the Company for purposes of Sections 13(a)(v) and 13(c) and any determination by the Board of Directors after the date of this Agreement that Genzyme is a competitor to the Company shall be made in good faith.

The holders of Restricted Stock hereby covenant and agree that all of the information disclosed to such holders pursuant to the provisions of this Section 13(c) shall be treated in accordance with Section 13(a)(vi) of this Agreement.

14. Miscellaneous.

(a) All covenants and agreements contained in this Agreement by or on behalf of any of the parties hereto shall bind and inure to the benefit of the respective successors and assigns of the parties hereto (including without limitation transferees of any Preferred Shares or Restricted Stock), whether so expressed or not, *provided*, *however*, that the right of first offer set forth in Section 12 may be assigned in accordance with Section 12F and the registration rights conferred herein on the holders of Preferred Shares, Conversion Shares or Restricted Stock shall only inure to the benefit of a transferee of Preferred Shares, Conversion Shares or Restricted Stock if (i) there is transferred to such transferee at least 100,000 shares of Restricted Stock held by such Investor immediately following the final Closing under the Purchase Agreement (as defined therein) (as adjusted for stock splits, stock dividends, combinations, subdivisions, recapitalizations and the like) to the direct or indirect transferor of such transferee or (ii) such transferee is a partner, shareholder or Affiliate of a party hereto (including any fund under common investment management with the transferor).

(b) All notices, requests, consents and other communications hereunder shall be in writing and shall be delivered in person, delivered by overnight courier service or mailed by certified or registered mail, return receipt requested, addressed as follows:

(i) if to the Company or any other party hereto, at the address of such party set forth in the Purchase Agreement;

(ii) if to any subsequent holder of Preferred Shares, Conversion Shares or Restricted Stock, to it at such address as may have been furnished to the Company in writing by such holder;

or, in any case, at such other address or addresses as shall have been furnished in writing to the Company (in the case of a holder of Preferred Shares, Conversion Shares or Restricted Stock) or to the holders of Preferred Shares, Conversion Shares or Restricted Stock (in the case of the Company) in accordance with the provisions of this paragraph.

(c) This Agreement shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware as to matters within the scope thereof, and as to all other matters shall be governed by and construed in accordance with the internal laws of the State of Delaware, without regard to its principles of conflicts of laws.

(d) This Agreement (including the Exhibits hereto, if any) constitutes the full and entire understanding and agreement among the parties with regard to the subjects hereof and thereof, and supersedes the Prior Investor Rights Agreement in its entirety. This Agreement may not be terminated, amended or modified, and no provision hereof may be waived, without the written consent of the Company and the holders of at least a majority in interest of the Conversion Shares (except that no written consent shall be required to add additional Investors as signatories to this Agreement as provided in Section 14(k) pursuant to the Purchase Agreement or a transfer of shares of Restricted Stock pursuant to which rights under this Agreement are validly assigned).

(e) This Agreement may be executed and delivered by facsimile 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.

(f) The obligations of the Company to register shares of Restricted Stock under Sections 4, 5 or 6 shall terminate on the seventh anniversary of the date of a Qualified Public Offering.

(g) If requested in writing by the underwriters for the IPO, each holder of Restricted Stock who is a party to this Agreement shall agree not to directly or indirectly sell, offer to sell, contract to sell (including, without limitation, any short sale), grant any option to purchase or otherwise transfer or dispose of any shares of Restricted Stock or any other shares of Common Stock (other than shares of Restricted Stock or other shares of Common Stock being registered in such offering), without the consent of such underwriters, for a period not to exceed 180 days following the effective date of the registration statement relating to such offering, which period may be extended upon the request of the managing underwriter, to the extent required by any 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; *provided, however*, that all persons entitled to registration rights with respect to shares of Common Stock who are not parties to this Agreement, all other persons selling shares of Common Stock in such offering, all persons holding in excess of 1% of the capital stock of the Company on a fully diluted basis and all executive officers and directors of the Company shall also have agreed not to sell publicly their Common Stock under the circumstances and pursuant to the terms set forth in this Section 14(g); and *provided, further, however*, that any such lock-up agreement shall provide that if the managing underwriter releases any shares from the lock-up with respect to such offering prior to the scheduled expiration date, the managing underwriter shall contemporaneously release a *pro rata* portion of the Restricted Stock from such lock-up.

(h) Without the prior written consent of the holders of a majority of the Conversion Shares and other than as provided in Section 14(k) below, the Company shall not grant to any third party any registration rights more favorable than or inconsistent with any of those contained herein, so long as any of the registration rights under this Agreement remains in effect; *provided*, *however*, that the Company may grant to a third party piggy-back registration rights upon the approval of such grant by the unanimous consent of the Board of Directors of the Company, and the addition of additional Investors as signatories to this Agreement shall not constitute a grant inconsistent with the rights herein.

(i) If any provision of this Agreement shall be held to be illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall attach only to such provision and shall not in any manner affect or render illegal, invalid or unenforceable any other provision of this Agreement, and this Agreement shall be carried out as if any such illegal, invalid or unenforceable provision were not contained herein.

(j) All shares of Restricted Stock held or acquired by affiliated entities (including affiliated venture capital funds) or persons shall be aggregated together for the purpose of determining the availability of any rights under this Agreement.

(k) Any purchaser of Preferred Stock pursuant to the Purchase Agreement shall become a party to this Agreement by executing and delivering to the Company a counterpart to this Agreement. Upon such execution and delivery, such purchaser shall be deemed to be an “Investor” hereunder with all of the rights and obligations thereof. The execution and delivery of such counterparts, and the updates of Exhibit 1.01 as a result thereof, shall not constitute an amendment under Section 14 of this Agreement.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

GLYCOMIMETICS, INC.

By: /s/ Rachel King
Rachel King
Chief Executive Officer

NEW ENTERPRISE ASSOCIATES 10, LIMITED PARTNERSHIP

By: NEA Partners 10, Limited Partnership, its General Partner

By: _____
Name:
Title:

NEW ENTERPRISE ASSOCIATES 13, L.P.

By: NEA Partners 13, L.P., its general partner

By: NEA 13 GP, LTD, its general partner

By: _____
Name:
Title: Director

ALLIANCE TECHNOLOGY VENTURES III, LP

By: ATV III Partners, its General Partner

By: _____
Name: Michael A. Henos
Title: Manager

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

GLYCOMIMETICS, INC.

By: _____
Rachel King
Chief Executive Officer

NEW ENTERPRISE ASSOCIATES 10, LIMITED PARTNERSHIP

By: NEA Partners 10, Limited Partnership, its General Partner

By: /s/ Charles W. Newhall, III
Name: Charles W. Newhall, III
Title: General Partner

NEW ENTERPRISE ASSOCIATES 13, L.P.

By: NEA Partners 13, L.P., its general partner

By: NEA 13 GP, LTD, its general partner

By: /s/ Charles W. Newhall, III
Name: Charles W. Newhall, III
Title: Director

ALLIANCE TECHNOLOGY VENTURES III, LP

By: ATV III Partners, its General Partner

By: _____
Name: Michael A. Henos
Title: Manager

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

GLYCOMIMETICS, INC.

By: _____
Rachel King
Chief Executive Officer

NEW ENTERPRISE ASSOCIATES 10, LIMITED PARTNERSHIP

By: NEA Partners 10, Limited Partnership, its General Partner

By: _____
Name:
Title:

NEW ENTERPRISE ASSOCIATES 13, L.P.

By: NEA Partners 13, L.P., its general partner

By: NEA 13 GP, LTD, its general partner

By: _____
Name:
Title: Director

ALLIANCE TECHNOLOGY VENTURES III, LP

By: ATV III Partners, its General Partner

By: /s/ Michael A. Henos
Name: Michael A. Henos
Title: Manager

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

ATV III AFFILIATES FUND, LP

By: ATV III Partners, its General Partner

By: /s/ Michael A. Henos
Name: Michael A. Henos
Title: Manager

Mary K. Mahley

NOVARTIS BIOVENTURES LTD

By: Novartis Venture Fund

By: _____
Name:
Title:

GLYCOTECH CORPORATION

By: _____
Name: John Magnani, Ph.D.
Title: President and Chief Executive Officer

John Magnani, Ph.D.

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

ATV III AFFILIATES FUND, LP

By: ATV III Partners, its General Partner

By: _____
Name: Michael A. Henos
Title: Manager

/s/ Mary K. Mahley
Mary K. Mahley

NOVARTIS BIOVENTURES LTD

By: Novartis Venture Fund

By: _____
Name:
Title:

GLYCOTECH CORPORATION

By: _____
Name: John Magnani, Ph.D.
Title: President and Chief Executive Officer

_____
John Magnani, Ph.D.

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

ATV III AFFILIATES FUND, LP

By: ATV III Partners, its General Partner

By: _____
Name: Michael A. Henos
Title: Manager

_____
Mary K. Mahley

NOVARTIS BIOVENTURES LTD

~~By: Novartis Venture Fund~~

By: /s/ H. S. Zivi
Name: H. S. Zivi
Title: Deputy Chairman

GLYCOTECH CORPORATION

By: _____
Name: John Magnani, Ph.D.
Title: President and Chief Executive Officer

_____
John Magnani, Ph.D.

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

ATV III AFFILIATES FUND, LP

By: ATV III Partners, its General Partner

By: _____
Name: Michael A. Henos
Title: Manager

_____
Mary K. Mahley

NOVARTIS BIOVENTURES LTD

By: Novartis Venture Fund

By: _____
Name:
Title:

GLYCOTECH CORPORATION

By: /s/ John Magnani, Ph.D.
Name: John Magnani, Ph.D.
Title: President and Chief Executive Officer

/s/ John Magnani, Ph.D.
John Magnani, Ph.D.

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

U.S. SMALL BUSINESS ADMINISTRATION AS RECEIVER FOR ANTHEM CAPITAL II, L.P.

By: /s/ Thomas G. Morris
Thomas G. Morris
Director, Office of SBIC Liquidation

PINTO TECHNOLOGY VENTURES, L.P.

By: Pinto Technology Ventures G.P., L.P.
its General Partner

By: _____
Evan S. Melrose, M.D.
Managing Director

MARYLAND DEPARTMENT OF BUSINESS AND ECONOMIC DEVELOPMENT

By: _____
Name:
Title:

_____
Lauren M. Nehra

_____
Katie S. Nehra

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

ANTHEM CAPITAL II, L.P.

By: Anthem Capital Partners, LLC
Its: General Partner

By: _____
William M. Gust
Manager

PINTO TECHNOLOGY VENTURES, L.P.

By: Pinto Technology Ventures G.P., L.P.
its General Partner

By: /s/ Evan S. Melrose, M.D.
Evan S. Melrose, M.D.
Managing Director

MARYLAND DEPARTMENT OF BUSINESS AND ECONOMIC DEVELOPMENT

By: _____
Name:
Title:

_____
Lauren M. Nehra

_____
Katie S. Nehra

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

U.S. SMALL BUSINESS ADMINISTRATION AS RECEIVER FOR ANTHEM CAPITAL II, L.P.

By: _____
Thomas G. Morris
Director, Office of SBIC Liquidation

PINTO TECHNOLOGY VENTURES, L.P.

By: Pinto Technology Ventures G.P., L.P.
its General Partner

By: _____
Evan S. Melrose, M.D.
Managing Director

MARYLAND DEPARTMENT OF BUSINESS AND ECONOMIC DEVELOPMENT

By: /s/ James L. Henry
Name: James L. Henry
Title: Program Director, Office of Finance Programs

_____
Lauren M. Nehra

_____
Katie S. Nehra

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

U.S. SMALL BUSINESS ADMINISTRATION AS RECEIVER FOR ANTHEM CAPITAL II, L.P.

By: _____
Thomas G. Morris
Director, Office of SBIC Liquidation

PINTO TECHNOLOGY VENTURES, L.P.

By: Pinto Technology Ventures G.P., L.P.
its General Partner

By: _____
Evan S. Melrose, M.D.
Managing Director

MARYLAND DEPARTMENT OF BUSINESS AND ECONOMIC DEVELOPMENT

By: _____
Name:
Title:

/s/ Lauren M. Nehra
Lauren M. Nehra

_____
Katie S. Nehra

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

U.S. SMALL BUSINESS ADMINISTRATION AS RECEIVER FOR ANTHEM CAPITAL II, L.P.

By: _____
Thomas G. Morris
Director, Office of SBIC Liquidation

PINTO TECHNOLOGY VENTURES, L.P.

By: Pinto Technology Ventures G.P., L.P.
its General Partner

By: _____
Evan S. Melrose, M.D.
Managing Director

MARYLAND DEPARTMENT OF BUSINESS AND ECONOMIC DEVELOPMENT

By: _____
Name:
Title:

_____
Lauren M. Nehra

/s/ Katie S. Nehra
Katie S. Nehra

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

GENZYME CORPORATION

By: /s/ Richard Douglas, PhD
Name: Richard Douglas, PhD
Title: Senior Vice President

Claudia Henos

RSN ENTERPRISES LLC

By: _____
Name: Ralph Snyderman
Title:

ESTATE OF LANGLEY B. KENZIE. ROSS B. KENZIE, ADMINISTRATOR

Ross B. Kenzie
Administrator

Ross B. Kenzie

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

GENZYME CORPORATION

By: _____
Name: Richard Douglas, PhD
Title: Senior Vice President

/s/ Claudia Henos
Claudia Henos

RSN ENTERPRISES LLC

By: _____
Name: Ralph Snyderman
Title:

ESTATE OF LANGLEY B. KENZIE, ROSS B. KENZIE, ADMINISTRATOR

_____
Ross B. Kenzie
Administrator

_____
Ross B. Kenzie

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

GENZYME CORPORATION

By: _____
Name: Allison Robbins
Title:

_____
Claudia Henos

RSN ENTERPRISES LLC

By: /s/ Ralph Snyderman
Name: Ralph Snyderman
Title: President

ESTATE OF LANGLEY B. KENZIE, ROSS B. KENZIE, ADMINISTRATOR

_____
Ross B. Kenzie
Administrator

IN WITNESS WHEREOF, the parties have executed and delivered this Amended and Restated Investor Rights Agreement as of the date first above written.

GENZYME CORPORATION

By: _____
Name: Richard Douglas, PhD
Title: Senior Vice President

_____
Claudia Henos

RSN ENTERPRISES LLC

By: _____
Name: Ralph Snyderman
Title:

ESTATE OF LANGLEY B. KENZIE, ROSS B. KENZIE, ADMINISTRATOR

/s/ Ross B. Kenzie
Ross B. Kenzie
Administrator

/s/ Ross B. Kenzie
Ross B. Kenzie

Exhibit 1.01

GLYCOMIMETICS, INC.

SCHEDULE OF INVESTORS

Investor	No. of Series A-1 Preferred Shares	No. of Converted Shares
John Magnani, Ph.D 325 West Side Drive, Apartment 101 Gaithersburg, MD 20878	32,918	32,000
GlycoTech Corporation 14915 Broschart Road, Suite 200 Rockville, MD 20850	—	16,000
New Enterprise Associates 10, Limited Partnership 1119 St. Paul Street Baltimore, MD 21202	11,250,850	1,938,193
New Enterprise Associates 13, Limited Partnership 1119 St. Paul Street Baltimore, MD 21202	11,824,058	—
Alliance Technology Ventures III, L.P. 8995 Westside Parkway Suite 200 Alpharetta, GA 30004	1,103,540	379,363
ATV III Affiliates Fund, L.P. 8995 Westside Parkway Suite 200 Alpharetta, GA 30004	11,150	4,431
Novartis Bioventures Ltd. 131 Front Street Hamilton HM 12 Bermuda	1,157,267	111,515

Investor	No. of Series A-1 Preferred Shares	No. of Converted Shares
Mary K. Mahley c/o Ross Kenzie P.O. Box 268 Derby, N.Y. 14047 rossbk@octhouse.com	58,173	26,373
Ross Kenzie P.O. Box 268 Derby, N.Y. 14047 rossbk@octhouse.com	19,706	—
Anthem Capital II, L.P. 16 South Calvert Street, Suite 800 Baltimore, MD 21202	1,121,646	232,003
Pinto Technology Ventures, L.P. 1600 Smith Street, Suite 3900 Houston, Texas 77022	—	165,716
Maryland Department Of Business and Economic Development 217 East Redwood Street, 11th Floor Baltimore, MD 21202	—	63,995
Katie S. Nehra c/o N. Partners LLC 12 Blythewood Road Baltimore, Maryland 21210 Phone: (410) 323- 0492 Fax: (410) 323-6119	42,050	6,373
Lauren Nehra c/o N. Partners LLC 12 Blythewood Road Baltimore, Maryland 21210 Phone: (410) 323- 0492 Fax: (410) 323-6119	42,050	6,373
Estate of Langley H. Kenzie, Ross B. Kenzie, Administrator P.O. Box 268 Derbym NY 14047	62,447	—
Genzyme Corporation Allison Robbins, MBA, CFA Genzyme Ventures Genzyme Center	3,941,352	—

Investor	No. of Series A-1 Preferred Shares	No. of Converted Shares
500 Kendall Street, 12th Floor Cambridge, MA 02142		
Claudia Henos 8019 Warwick Gardens Lane University Park, FL 34201	39,413	—
Ralph Snyderman RSN Enterprises LLC 5800 Ten Springs Lane Durham, NC 27705	19,706	—

Exhibit 10.3

LEASE AGREEMENT

THIS LEASE AGREEMENT ("**this Lease**") is made as of this 1st day of July, 2010, between **ARE-QRS CORP**., a Maryland corporation ("**Landlord**"), and **GLYCOMIMETICS, INC**., a Delaware corporation ("**Tenant**").

BASIC LEASE PROVISIONS

Address: Suite 250, 401 Professional Drive, Gaithersburg, Maryland 20878.

Premises: That portion of the Project, containing approximately 14,425 rentable square feet, as determined by Landlord, as shown on **Exhibit A**. Gaudreau, Inc., Landlord's architect, has measured the area of the Premises pursuant to the 1996 Standard Method of Measuring Floor Area in Office Buildings as adopted by the Building Owners and Managers Association (ANSI/BOMA Z65.1-1996) ("**BOMA Standards**"). Tenant acknowledges receipt of such measurement and confirms that (a) Tenant has had an opportunity to confirm such measurement with an architect of its selection before the Commencement Date, and (b) such measurement shall be conclusive as to the area of the Premises. Landlord covenants and agrees, irrespective of any change in the BOMA Standards subsequent to the Commencement Date, that Landlord shall not re-measure the Premises during the Term.

Project: The real property on which the building ("**Building**") in which the Premises are located, together with all improvements thereon and appurtenances thereto as described on **Exhibit B**.

Base Rent: $28,850, per month

Rentable Area of Premises: 14,425 sq. ft.

Rentable Area of Project: 63,154 sq. ft.

Tenant's Share of Operating Expenses: 22.84%

Security Deposit: $57,700

Target Commencement Date: October 15, 2010

Rent Adjustment Percentage: 3%

Base Term: Beginning on the Commencement Date and ending 60 months from the first day of the first full month following the Rent Commencement Date.

Permitted Use: research and development laboratory, related office and other related uses consistent with the character of the Project and otherwise in compliance with the provisions of Section 7 hereof.

Address for Rent Payment:

For check payments remit to:
P.O. Box 79840
Baltimore, MD 21279-0840

For overnight courier remit to:
Lockbox #79840
c/o SunTrust Bank
1000 Stewart Avenue
Glen Burnie, MD 21061

Landlord's Notice Address:

Attn: Corporate Secretary
385 E. Colorado Blvd., Suite 299
Pasadena, CA 91101
626-578-0777

Tenant's Notice Address (before Rent Commencement Date):

101 Orchard Ridge Drive
Suite 1E
Gaithersburg, Maryland 20878

Tenant's Notice Address (from and after Rent Commencement Date):

Suite 250
401 Professional Drive
Gaithersburg, Maryland 20878

The following Exhibits and Addenda are attached hereto and incorporated herein by this reference:

☒ **EXHIBIT A** – PREMISES DESCRIPTION
☒ **EXHIBIT B** – DESCRIPTION OF PROJECT
☒ **EXHIBIT C** – WORK LETTER
☒ **EXHIBIT D** – COMMENCEMENT DATE
☒ **EXHIBIT E** – RULES AND REGULATIONS
☒ **EXHIBIT F** – TENANT'S PERSONAL PROPERTY

1. **Lease of Premises**. Upon and subject to all of the terms and conditions hereof, Landlord hereby leases the Premises to Tenant and Tenant hereby leases the Premises from Landlord. The portions of the Project which are for the non-exclusive use of tenants of the Project are collectively referred to herein as the "**Common Areas**." Landlord grants Tenant, its employees, invitees, licensees, and other visitors, a non-exclusive easement to use the Common Areas during the Term in common with others entitled to use such Common Areas. Landlord reserves the right to modify Common Areas, provided that such modifications do not materially adversely affect Tenant's use of the Premises for the Permitted Use. The loading dock located on the second floor of the Building shall constitute a Common Area, and Tenant shall have non-exclusive access and the right to use the loading dock in common with other tenants of the Project.

2. **Delivery; Acceptance of Premises; Commencement Date**. Landlord shall use reasonable efforts to deliver the Premises to Tenant on or before the Target Commencement Date, with Landlord's Work, if any, Substantially Completed ("**Delivery**" or "**Deliver**"). If Landlord fails to timely Deliver the Premises, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this Lease shall not be void or voidable except as provided herein. If Landlord does not Deliver the Premises within 60 days of the Target Commencement Date for any reason other than Force Majeure Delays, Tenant Delays, and Existing Tenant Delay (all as defined below), this Lease may be terminated by Landlord or Tenant by written notice to the other, and if so terminated by either: (a) the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant, and (b) neither Landlord nor Tenant shall have any further rights, duties or obligations under this Lease, except with respect to provisions which expressly survive termination of this Lease. As used herein, (i) "**Landlord's Work**" means the work of constructing the improvements to the Premises described on **Exhibit C**, which shall be performed by Landlord at its sole cost and expense, (ii) "**Force Majeure Delays**" means delays arising by reason of any Force Majeure (as defined in Section 34), (iii) "**Tenant Delays**" means (A) Tenant's request for changes to Landlord's Work, regardless of whether any such changes are performed, (B) construction of any such changes, (C) Tenant's request for materials, finishes, or installations requiring unusually long lead times that were not originally included as a part of Landlord's Work, (D) Tenant's delay (which shall mean more than 5 business days) in reviewing, revising, or approving any plans and specifications relating to Landlord's Work, (E) Tenant's delay in providing information critical to the normal progression of the Project (Tenant shall provide such information as soon as reasonably possible, but in no event longer than 5 business days after receipt of any request for such information from Landlord), and (F) any other act or omission by Tenant or any Tenant Party (as defined herein), or persons employed by any of such persons, (iv) "**Substantially Completed**" means the substantial completion of Landlord's Work (A) in a good and workmanlike manner, (B) in accordance with the requirements described in **Exhibit C**, and (C) in accordance with all applicable Legal Requirements (including, but not limited to, securing the applicable final building inspection for Landlord's Work), subject only to normal "punch list" items, and (v) "**Existing Tenant Delay**" means the refusal or failure by the Existing Tenant (as defined below) to surrender the Premises by July 1, 2010 in accordance with the terms and conditions of the Existing Lease (as defined below). Landlord will promptly perform such punch list items. Tenant shall obtain, at its sole cost and expense, any applicable use and occupancy permit for the Premises issued by the applicable Governmental Authority. If Tenant does not elect to void this Lease within 5 business days of the lapse of such 60 day period, such right to void this Lease shall be waived and this Lease shall remain in full force and effect. If neither Landlord nor Tenant elects to void this Lease within 5 business days of the lapse of such 60 day period, such right to void this Lease shall be waived and this Lease shall remain in full force and effect.

Sequoia Pharmaceuticals, Inc. ("**Existing Tenant**"), is currently leasing the Premises from Landlord, and the lease agreement ("**Existing Lease**") between Landlord and Existing Tenant is scheduled to expire on July 1, 2010 subject to Landlord's right to advance the expiration date. Tenant understands, acknowledges, and agrees that Landlord makes no guaranty, representation, or assurance

that Landlord will be able to recapture the Premises from the Existing Tenant by July 1, 2010 and that Landlord shall have no obligation or duty to seek the vacation or removal of the Existing Tenant from the Premises.

The "**Commencement Date**" shall mean the date of full execution and delivery of this Lease. The "**Rent Commencement Date**" shall be the *earliest* of: (i) the date Landlord Delivers the Premises to Tenant; (ii) the date Landlord could have Delivered the Premises but for Tenant Delays; and (iii) the date Tenant conducts any business in all or any part of the Premises. Upon request of Landlord, Tenant shall execute and deliver a written acknowledgment of the Commencement Date, the Rent Commencement Date, and the expiration date of the Term when such are established in the form of the "Acknowledgement of Commencement Date" attached to this Lease as **Exhibit D**; provided, however, that Tenant's failure to execute and deliver such acknowledgment shall not affect Landlord's rights hereunder. The "**Term**" of this Lease shall be the Base Term, as defined above in the Basic Lease Provisions and the Extension Term that Tenant may elect pursuant to Section 40 hereof.

Except as set forth in the Work Letter, if applicable, and the provisions of this Section 2: (i) Tenant shall accept the Premises in their condition as of the Commencement Date, subject to all applicable Legal Requirements (as defined in Section 7 hereof); (ii) Landlord shall have no obligation for any defects in the Premises; and (iii) Tenant's taking possession of the Premises shall be conclusive evidence that Tenant accepts the Premises and that the Premises were in good condition at the time possession was taken. Any occupancy of the Premises by Tenant before the Commencement Date shall be subject to all of the terms and conditions of this Lease, including the obligation to pay Rent. Notwithstanding the foregoing provisions of this paragraph, Tenant shall have a period of 90 days after Landlord Delivers the Premises to Tenant to reasonably identify in writing any latent defects in the mechanical, electrical and plumbing systems serving the Premises. For purposes of this paragraph, "**latent defects**" means those material defects in such systems that could not have been identified or discovered through a reasonable inspection of such systems conducted by a qualified technician. Landlord will promptly repair such identified defects. On Landlord's receipt of an executed non-reliance letter in the form provided by Landlord to Tenant, but by no later than the Commencement Date, Landlord shall provide Tenant with a copy of the most recent decommissioning report relating to the Premises.

Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Premises or the Project, and/or the suitability of the Premises or the Project for the conduct of Tenant's business, and Tenant waives any implied warranty that the Premises or the Project are suitable for the Permitted Use. This Lease constitutes the complete agreement of Landlord and Tenant with respect to the subject matter hereof and supersedes any and all prior representations, inducements, promises, agreements, understandings and negotiations which are not contained herein. Landlord in executing this Lease does so in reliance upon Tenant's representations, warranties, acknowledgments and agreements contained herein.

3. **Rent**.

(a) **Base Rent**. The first month's Base Rent (which shall be credited against the first month that Base Rent is due) and the Security Deposit shall be due and payable on delivery of an executed copy of this Lease to Landlord. Beginning on the first full calendar month after the Rent Commencement Date but subject to the provisions of Section 4(a), Tenant shall pay to Landlord in advance, without demand, abatement, deduction or set-off, monthly installments of Base Rent on or before the first day of each calendar month during the Term hereof, in lawful money of the United States of America, at the office of Landlord for payment of Rent set forth above, or to such other person or at such other place as Landlord may from time to time designate in writing upon 30 days prior written notice to Tenant. Payments of Base Rent for any fractional calendar month shall be prorated. The obligation of Tenant to pay Base Rent and other sums to Landlord and the obligations of Landlord under this Lease are independent obligations. Tenant shall have no right at any time to abate, reduce, or set-off any Rent (as defined in Section 5) due hereunder except for any abatement as may be expressly provided in this Lease.

(b) **Additional Rent**. In addition to Base Rent, Tenant agrees to pay to Landlord as additional rent ("**Additional Rent**"): (i) Tenant's Share of "Operating Expenses" (as defined in Section 5), and (ii) any and all other amounts Tenant assumes or agrees to pay under the provisions of this Lease, including, without limitation, any and all other sums that may become due by reason of any default of Tenant or failure to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after any applicable notice and cure period.

4. **Base Rent Adjustments**. Base Rent shall be increased on each anniversary of the first day of the first full month following the Rent Commencement Date during the Term of this Lease (each an "**Adjustment Date**") by multiplying the Base Rent payable immediately before such Adjustment Date by the Rent Adjustment Percentage and adding the resulting amount to the Base Rent payable immediately before such Adjustment Date. Base Rent, as so adjusted, shall thereafter be due as provided herein. Base Rent adjustments for any fractional calendar month shall be prorated.

(a) Notwithstanding anything to the contrary contained in this Lease, but provided Tenant is not then in Default hereunder, Landlord hereby grants Tenant an abatement of the Base Rent and Operating Expenses payable during the period between the Rent Commencement Date and the expiration of the 15 full calendar month period after the calendar month in which the Rent Commencement Date occurs. Thereafter, Tenant shall pay the full amount of Base Rent and Operating Expenses due in accordance with the provisions of this Lease. Notwithstanding anything to the contrary in this Section 4(a), the adjustment in the Base Rent as set forth in this Section 4 shall be based on the full and unabated amount of Base Rent payable for the first 12 month period from and after the Rent Commencement Date.

5. **Operating Expense Payments**. Landlord shall deliver to Tenant a reasonable written estimate of Operating Expenses for each calendar year during the Term ("**Annual Estimate**"), which may be revised by Landlord no more than one time during such calendar year. Beginning on the Rent Commencement Date but subject to the provisions of Section 4(a), Tenant shall pay Landlord on or before the first day of each calendar month during the Term hereof an amount equal to 1/12th of Tenant's Share of the Annual Estimate. Payments for any fractional calendar month shall be prorated.

The term "**Operating Expenses**" means all costs and expenses of any kind or description whatsoever actually incurred or accrued each calendar year by Landlord with respect to the Project (including, without duplication, Taxes (as defined in Section 9), reasonable reserves consistent with good business practice for future repairs and replacements, capital repairs and improvements amortized over the lesser of 7 years or the useful life of such capital items in accordance with generally accepted accounting principles, and the costs of Landlord's third party property manager or, if there is no third party property manager, administration rent in the amount of 4% of Base Rent), excluding only:

(a) the original construction costs of the Project and renovation prior to the date of this Lease and costs of correcting defects in such original construction or renovation;

(b) capital expenditures for expansion of the Project;

(c) interest, principal payments of Mortgage (as defined in Section 27) debts of Landlord, financing costs and amortization of funds borrowed by Landlord, whether secured or unsecured and all payments of base rent (but not taxes or operating expenses) under any ground lease or other underlying lease of all or any portion of the Project;

(d) depreciation of the Project (except for capital improvements, the cost of which are includable in Operating Expenses);

(e) advertising, legal and space planning expenses and leasing commissions and other costs and expenses incurred in procuring and leasing space to tenants for the Project, including any leasing office maintained in the Project, free rent and construction allowances for tenants;

(f) legal and other expenses incurred in the negotiation or enforcement of leases;

(g) completing, fixturing, improving, renovating, painting, redecorating or other work, which Landlord pays for or performs for other tenants within their premises, and costs of correcting defects in such work;

(h) costs of utilities outside normal business hours sold to tenants of the Project;

(i) costs to be reimbursed by other tenants of the Project or Taxes to be paid directly by Tenant or other tenants of the Project, whether or not actually paid;

(j) salaries, wages, benefits and other compensation paid to officers and employees of Landlord who are not assigned in whole or in part to the operation, management, maintenance or repair of the Project;

(k) general organizational, administrative and overhead costs relating to maintaining Landlord's existence, either as a corporation, partnership, or other entity, including general corporate, legal and accounting expenses;

(l) costs (including all attorneys' fees and costs of settlement, judgments and payments in lieu thereof) incurred in connection with disputes with tenants, other occupants, or prospective tenants, and costs and expenses, including legal fees, incurred in connection with negotiations or disputes with employees, consultants, management agents, leasing agents, purchasers or mortgagees of the Building;

(m) costs incurred by Landlord due to the violation by Landlord, its employees, agents or contractors or any tenant of the terms and conditions of any lease of space in the Project or any Legal Requirement (as defined in Section 7);

(n) penalties, fines or interest incurred as a result of Landlord's inability or failure to make payment of Taxes and/or to file any tax or informational returns when due, or from Landlord's failure to make any payment of Taxes required to be made by Landlord hereunder before delinquency;

(o) overhead and profit increment paid to Landlord or to subsidiaries or affiliates of Landlord for goods and/or services in or to the Project to the extent the same exceeds the costs of such goods and/or services rendered by unaffiliated third parties on a competitive basis;

(p) costs of Landlord's charitable or political contributions, or costs of acquisition and maintenance of fine art located at the Project;

(q) costs in connection with services (including electricity), items or other benefits of a type which are not standard for the Project and which are not available to Tenant without specific charges therefor, but which are provided to another tenant or occupant of the Project, whether or not such other tenant or occupant is specifically charged therefor by Landlord;

(r) costs incurred in the sale or refinancing of the Project (including any applicable recordation and transfer taxes on any deed or mortgage);

(s) net income taxes of Landlord or the owner of any interest in the Project (except to the extent such net income taxes are in substitution for any Taxes payable hereunder), franchise, capital stock, gift, estate or inheritance taxes or any federal, state or local documentary taxes imposed against the Project or any portion thereof or interest therein;

(t) costs incurred in connection with environmental clean up, response action, or remediation on, in or under or about the Project, to the extent such costs relate to matters existing before the Commencement Date; and

(u) any expenses otherwise includable within Operating Expenses to the extent actually reimbursed by persons other than tenants of the Project under leases for space in the Project.

Within 90 days after the end of each calendar year (or such longer period as may be reasonably required, but not to exceed 150 days), Landlord shall furnish to Tenant a statement (an "**Annual Statement**") showing in reasonable detail: (a) the total and Tenant's Share of actual Operating Expenses for the previous calendar year, and (b) the total of Tenant's payments in respect of Operating Expenses for such year. If Tenant's Share of actual Operating Expenses for such year exceeds Tenant's payments of Operating Expenses for such year, the excess shall be due and payable by Tenant as Rent within 30 days after delivery of such Annual Statement to Tenant. If Tenant's payments of Operating Expenses for such year exceed Tenant's Share of actual Operating Expenses for such year Landlord shall pay the excess to Tenant within 30 days after delivery of such Annual Statement, except that after the expiration, or earlier termination of the Term or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord.

The Annual Statement shall be final and binding upon Tenant unless Tenant, within 90 days after Tenant's receipt thereof, shall contest any item therein by giving written notice to Landlord, specifying each item contested and the reason therefor. If, during such 90 day period, Tenant reasonably and in good faith questions or contests the accuracy of Landlord's statement of Tenant's Share of Operating Expenses, Landlord will provide Tenant with access to copies of Landlord's books and records relating to the operation of the Project (at Landlord's regional office in Gaithersburg, Maryland or other location in the Washington, D.C. metropolitan area) and such information as Landlord reasonably determines to be responsive to Tenant's questions ("**Expense Information**"). If after Tenant's review of such Expense Information, Landlord and Tenant cannot agree upon the amount of Tenant's Share of Operating Expenses within 30 days after Tenant's completion of its review of the Expense Information, then Tenant shall have the right to have an independent public accounting firm selected by Tenant, working pursuant to a fee arrangement other than a contingent fee (at Tenant's sole cost and expense) and approved by Landlord (which approval shall not be unreasonably withheld or delayed), audit and/or review the Expense Information for the year in question ("**Independent Review**"). For purposes of this paragraph, Landlord hereby approves Grant Thornton LLP, Tenant's current accounting firm, or other comparable Tier Two or larger public accounting firm in the United States reasonably acceptable to Landlord. The results of any such Independent Review shall be binding on Landlord and Tenant. If the Independent Review shows that the payments actually made by Tenant with respect to Operating Expenses for the calendar year in question exceeded Tenant's Share of Operating Expenses for such calendar year, Landlord shall at Landlord's option either (i) credit the excess amount to the next succeeding installments of estimated Operating Expenses or (ii) pay the excess to Tenant within 30 days after delivery of such statement, except that after the expiration or earlier termination of this Lease or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. If the Independent Review shows that Tenant's payments with respect to Operating Expenses for such calendar year were less than Tenant's Share of Operating Expenses for the calendar year, Tenant shall pay the deficiency to Landlord within 30 days after delivery of such statement. If the Independent Review shows that Tenant has overpaid with respect to Operating Expenses by more than 5% then Landlord shall reimburse Tenant for all costs incurred by Tenant for the Independent Review. Operating Expenses for the calendar years in which Tenant's obligation to share pay Operating Expenses begins and ends shall be prorated.

"**Tenant's Share**" shall be the percentage set forth in the Basic Lease Provisions as Tenant's Share as reasonably adjusted by Landlord for changes in the physical size of the Premises or the Project occurring thereafter. Landlord may equitably increase Tenant's Share for any item of expense or cost reimbursable by Tenant that relates to a repair, replacement, or service that benefits only the Premises or only a portion of the Project that includes the Premises or that varies with occupancy or use. Base Rent, Tenant's Share of Operating Expenses, and all other amounts payable by Tenant to Landlord hereunder are collectively referred to herein as "**Rent**."

6. **Security Deposit**. Tenant shall deposit with Landlord, upon delivery of an executed copy of this Lease to Landlord, a security deposit ("**Security Deposit**") for the performance of all of

Tenant's obligations hereunder in the amount set forth in the Basic Lease Provisions, which Security Deposit shall be in the form of an unconditional and irrevocable letter of credit ("**Letter of Credit**"): (i) in form and substance reasonably satisfactory to Landlord, (ii) naming Landlord as beneficiary, (iii) expressly allowing Landlord to draw upon it at any time from time to time by delivering to the issuer notice that Tenant is then in Default (as defined in Section 20) and Landlord is entitled to draw thereunder, (iv) issued by an FDIC-insured financial institution reasonably satisfactory to Landlord, and (v) redeemable by presentation of a sight draft in Maryland. If Tenant does not provide Landlord with a substitute Letter of Credit complying with all of the requirements hereof at least 10 days before the stated expiration date of any then current Letter of Credit, Landlord shall have the right to draw the full amount of the current Letter of Credit and hold the funds drawn in cash without obligation for interest thereon as the Security Deposit. The Security Deposit shall be held by Landlord as security for the performance of Tenant's obligations under this Lease. The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's Default. Upon each occurrence of a Default that remains uncured, Landlord may use all or any part of the Security Deposit to pay delinquent payments due under this Lease, and the cost of any damage, injury, expense or liability caused by such Default, without prejudice to any other remedy provided herein or provided by law. Upon any such use of all or any portion of the Security Deposit, Tenant shall pay Landlord on demand, or provide a replacement Letter of Credit in, the amount that will restore the Security Deposit to the amount set forth in the Basic Lease Provisions. Tenant hereby waives the provisions of any law, now or hereafter in force, which provide that Landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of Rent, to repair damage caused by Tenant or to clean the Premises, it being agreed that Landlord may, in addition, claim those sums reasonably necessary to compensate Landlord for any other loss or damage, foreseeable or unforeseeable, caused by the act or omission of Tenant or any officer, employee, agent or invitee of Tenant. Upon bankruptcy or other debtor-creditor proceedings against Tenant, the Security Deposit shall be deemed to be applied first to the payment of Rent and other charges due Landlord for periods prior to the filing of such proceedings. Upon any such use of all or any portion of the Security Deposit, Tenant shall, within 5 days after demand from Landlord, restore the Security Deposit to its original amount. If Tenant shall fully perform every provision of this Lease to be performed by Tenant, the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within 60 days after the expiration or earlier termination of this Lease.

If Landlord transfers its interest in the Project or this Lease, Landlord shall either (a) transfer any Security Deposit then held by Landlord to a person or entity assuming Landlord's obligations under this Section 6, or (b) return to Tenant any Security Deposit then held by Landlord and remaining after the deductions permitted herein. Upon such transfer to such transferee or the return of the Security Deposit to Tenant, Landlord shall have no further obligation with respect to the Security Deposit, and Tenant's right to the return of the Security Deposit shall apply solely against Landlord's transferee. The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's Default. Landlord's obligation respecting the Security Deposit is that of a debtor, not a trustee, and no interest shall accrue thereon.

7. **Use**. The Premises shall be used solely for the Permitted Use set forth in the Basic Lease Provisions. The Premises shall be used in compliance with all laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions now or hereafter applicable to the Premises, and to the use and occupancy thereof, including, without limitation, the Americans With Disabilities Act, 42 U.S.C. § 12101, et seq. (together with the regulations promulgated pursuant thereto, "**ADA**") (collectively, "**Legal Requirements**" and each, a "**Legal Requirement**"). Tenant shall, upon 5 days' written notice from Landlord, discontinue any use of the Premises which is declared by any Governmental Authority (as defined in Section 9) having jurisdiction to be a violation of a Legal Requirement. Tenant will not use or permit the Premises to be used for any purpose or in any manner that would void Tenant's or Landlord's insurance, increase the insurance risk, or cause the disallowance of any sprinkler or other credits. Tenant shall not permit any part of the Premises to be used as a "place of public accommodation", as defined in the ADA or any similar legal requirement. Tenant shall reimburse Landlord promptly upon demand for any additional premium charged for any such

insurance policy by reason of Tenant's failure to comply with the provisions of this Section or otherwise caused by Tenant's use and/or occupancy of the Premises. Tenant will use the Premises in a careful, safe and proper manner and will not commit or permit waste, overload the floor or structure of the Premises, subject the Premises to use that would damage the Premises or obstruct or interfere with the rights of Landlord or other tenants or occupants of the Project, including conducting or giving notice of any auction, liquidation, or going out of business sale on the Premises, or using or allowing the Premises to be used for any unlawful purpose. Tenant shall cause any equipment or machinery to be installed in the Premises so as to reasonably prevent sounds or vibrations from the Premises from extending into Common Areas, or other space in the Project. Tenant shall not place any machinery or equipment weighing 500 pounds or more in or upon the Premises or transport or move such items through the Common Areas of the Project or in the Project elevators without the prior written consent of Landlord. Except as may be provided under the Work Letter, Tenant shall not, without the prior written consent of Landlord, use the Premises in any manner which will require ventilation, air exchange, heating, gas, steam, electricity or water beyond the existing capacity of the Project as proportionately allocated to the Premises based upon Tenant's Share as usually furnished for the Permitted Use. Landlord acknowledges that Tenant intends to locate at least 4, but up to 8, Fire Safes within the Premises, each of which may weigh approximately 900 pounds plus the weight of the contents, and Landlord hereby consents to Tenant locating such Fire Safes within the Premises.

(a) **Modifications to Common Areas**. Landlord shall, as an Operating Expense (to the extent such Legal Requirement is generally applicable to similar buildings in the area in which the Project is located) or at Tenant's expense (to the extent such Legal Requirement is applicable solely by reason of Tenant's, as compared to other tenants of the Project, particular use of the Premises) make any alterations or modifications to the Common Areas or the exterior of the Building that are required by Legal Requirements that are enacted after the Commencement Date, including the ADA. Tenant, at its sole expense, shall make any alterations or modifications to the interior of the Premises that are required by Legal Requirements (including, without limitation, compliance of the Premises with the ADA). Notwithstanding any other provision herein to the contrary, Tenant shall be responsible for any and all demands, claims, liabilities, losses, costs, expenses, actions, causes of action, damages or judgments, and all reasonable expenses incurred in investigating or resisting the same (including, without limitation, reasonable attorneys' fees, charges and disbursements and costs of suit) (collectively, "**Claims**") arising out of or in connection with any failure of the Premises to comply with any Legal Requirements, and Tenant shall indemnify, defend, hold and save Landlord harmless from and against any and all Claims arising out of or in connection with any failure of the Premises to comply with any Legal Requirement.

8. **Holding Over**. If, with Landlord's express written consent, Tenant retains possession of the Premises after the termination of the Term, (i) unless otherwise agreed in such written consent, such possession shall be subject to immediate termination by Landlord at any time, (ii) all of the other terms and provisions of this Lease (including, without limitation, the adjustment of Base Rent pursuant to Section 4 hereof) shall remain in full force and effect (excluding any expansion or renewal option or other similar right or option) during such holdover period, (iii) Tenant shall continue to pay Base Rent in the amount payable upon the date of the expiration or earlier termination of this Lease or such other amount as Landlord may indicate, in Landlord's sole and absolute discretion, in such written consent, and (iv) all other payments shall continue under the terms of this Lease. If Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without the express written consent of Landlord, (A) Tenant shall become a tenant at sufferance upon the terms of this Lease except that the monthly rental shall be equal to (I) 150% of Rent in effect during the last 30 days of the Term for the first 30 day period of the holdover, (II) 175% of Rent in effect during the last 30 days of the Term for the second 30 day period of the holdover, and (III) 200% of Rent in effect during the last 30 days of the Term for the third 30 day period of the holdover, and (B) Tenant shall be responsible for all damages suffered by Landlord resulting from or occasioned by Tenant's holding over (including, from and after 90 days after the end of the Term, consequential damages if Landlord has advised Tenant in advance of any particular consequential damages that Landlord may incur or suffer as a result of Tenant's holding over, including, without limitation, consequential damages that Landlord may incur or suffer by reason of Landlord's inability to lease the Premises or deliver occupancy to a particular tenant). Tenant shall pay Base Rent on a per diem basis at such monthly rental rate for each day that Tenant so retains possession. No

holding over by Tenant, whether with or without consent of Landlord, shall operate to extend this Lease except as otherwise expressly provided, and this Section 8 shall not be construed as consent for Tenant to retain possession of the Premises. Acceptance by Landlord of Rent after the expiration of the Term or earlier termination of this Lease shall not result in a renewal or reinstatement of this Lease.

9. **Taxes**. Landlord shall pay, as part of Operating Expenses, all taxes, levies, fees, assessments and governmental charges of any kind, existing as of the Commencement Date or thereafter enacted (collectively referred to as "**Taxes**"), imposed by any federal, state, regional, municipal, local or other governmental authority or agency, including, without limitation, quasi-public agencies (collectively, "**Governmental Authority**") during the Term, including, without limitation, all Taxes: (i) imposed on or measured by or based, in whole or in part, on rent payable to (or gross receipts received by) Landlord under this Lease and/or from the rental by Landlord of the Project or any portion thereof, or (ii) based on the square footage, assessed value or other measure or evaluation of any kind of the Premises or the Project, or (iii) assessed or imposed by or on the operation or maintenance of any portion of the Premises or the Project, including parking, or (iv) assessed or imposed by, or at the direction of, or resulting from Legal Requirements, or interpretations thereof, promulgated by any Governmental Authority, or (v) imposed as a license or other fee, charge, tax, or assessment on Landlord's business or occupation of leasing space in the Project. Landlord may contest by appropriate legal proceedings the amount, validity, or application of any Taxes or liens securing Taxes. Taxes shall not include any net income taxes imposed on Landlord except to the extent such net income taxes are in substitution for any Taxes payable hereunder, and franchise, rental, income or profit tax, net rents, capital levy or excise, estate, inheritance, and in no event shall Taxes include penalties or interest imposed for late payment of Taxes. If any such Tax is levied or assessed directly against Tenant, then Tenant shall be responsible for and shall pay the same at such times and in such manner as the taxing authority shall require. Tenant shall pay, prior to delinquency, any and all Taxes levied or assessed against any personal property or trade fixtures placed by Tenant in the Premises, whether levied or assessed against Landlord or Tenant. If any Taxes on Tenant's personal property or trade fixtures are levied against Landlord or Landlord's property, or if the assessed valuation of the Project is increased by a value attributable to improvements in or alterations to the Premises, whether owned by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, higher than the base valuation on which Landlord from time-to-time allocates Taxes to all tenants in the Project, Landlord shall have the right, but not the obligation, to pay such Taxes. Landlord's determination of any excess assessed valuation shall be binding and conclusive, absent manifest error. The amount of any such payment by Landlord shall constitute Additional Rent due from Tenant to Landlord immediately upon demand.

10. **Parking**. Subject to all Legal Requirements, Force Majeure, a Taking (as defined in Section 19 below) and the exercise by Landlord of its rights hereunder, Tenant shall have the right, at no additional cost to Tenant, in common with other tenants of the Project pro rata in accordance with the rentable area of the Premises and the rentable areas of the Project occupied by such other tenants, to park in those areas designated for non-reserved parking, subject in each case to Landlord's rules and regulations. Landlord may allocate parking spaces among Tenant and other tenants in the Project pro rata as described above if Landlord determines that such parking facilities are becoming crowded. Landlord shall not be responsible for enforcing Tenant's parking rights against any third parties, including other tenants of the Project.

11. **Utilities, Services.** Landlord shall provide, subject to the terms of this Section 11, janitorial services to the Common Areas, water, electricity, heat, light, power, telephone, sewer, and other utilities (including gas and fire sprinklers to the extent the Project is plumbed for such services), and refuse and trash collection (collectively, "**Utilities**"). Landlord shall pay, as Operating Expenses or subject to Tenant's reimbursement obligation, for all Utilities used on the Premises, all maintenance charges for Utilities, and any storm sewer charges or other similar charges for Utilities imposed by any Governmental Authority or Utility provider, and any taxes, penalties, surcharges or similar charges thereon. Landlord may cause any Utilities to be separately metered or charged directly to Tenant by the provider at Landlord's sole cost and expense, or if Landlord reasonably believes that Tenant is using more than its pro rata share of Utilities, at Tenant's expense. Tenant shall pay directly to the Utility provider, prior to delinquency, any separately metered Utilities and services which may be furnished to Tenant or the

Premises during the Term. Tenant shall pay, as part of Operating Expenses, its pro rata share of all charges for jointly metered Utilities serving the second floor of the Building based upon consumption, as reasonably determined by Landlord. No interruption or failure of Utilities, from any cause whatsoever other than Landlord's willful misconduct, shall result in eviction or constructive eviction of Tenant, termination of this Lease or the abatement of Rent. Tenant agrees to limit use of water and sewer with respect to Common Areas to normal restroom use.

Landlord's sole obligation for either providing emergency generators or providing emergency back-up power to Tenant shall be: (i) to provide emergency generators with not less than the stated capacity of the emergency generators located in the Building as of the Commencement Date, and (ii) to contract with a third party to maintain the emergency generators as per the manufacturer's standard maintenance guidelines. Landlord shall have no obligation to provide Tenant with operational emergency generators or back-up power or to supervise, oversee, or confirm that the third party maintaining the emergency generators is maintaining the generators as per the manufacturer's standard guidelines or otherwise. During any period of replacement, repair, or maintenance of the emergency generators when the emergency generators are not operational, including any delays thereto due to the inability to obtain parts or replacement equipment, Landlord shall have no obligation to provide Tenant with an alternative back-up generator or generators or alternative sources of back-up power. Tenant expressly acknowledges and agrees that Landlord does not guaranty that such emergency generators will be operational at all times or that emergency power will be available to the Premises when needed.

12. **Alterations and Tenant's Property**. Any alterations, additions, or improvements made to the Premises by or on behalf of Tenant, including additional locks or bolts of any kind or nature upon any doors or windows in the Premises, but excluding installation, removal or realignment of furniture systems (other than removal of furniture systems owned or paid for by Landlord) not involving any modifications to the structure or connections (other then by ordinary plugs or jacks) to Building Systems (as defined in Section 13) ("**Alterations**") shall be subject to Landlord's prior written consent, which may be given or withheld in Landlord's sole discretion if any such Alteration affects the structure or Building Systems, but which shall otherwise not be unreasonably withheld, conditioned, or delayed. Tenant may construct nonstructural Alterations in the Premises without Landlord's prior approval if the aggregate cost of all such work in any 12 month period does not exceed $25,000 (a "**Notice-Only Alteration**"), provided Tenant notifies Landlord in writing of such intended Notice-Only Alteration, and such notice shall be accompanied by plans, specifications, work contracts, and such other information concerning the nature and cost of the Notice-Only Alteration as may be reasonably requested by Landlord, which notice and accompanying materials shall be delivered to Landlord not less than 10 business days in advance of any proposed construction. If Landlord approves any Alterations, Landlord may impose such conditions on Tenant in connection with the commencement, performance and completion of such Alterations as Landlord may deem appropriate in Landlord's reasonable discretion. Any request for approval shall be in writing, delivered not less than 15 business days in advance of any proposed construction, and accompanied by plans, specifications, bid proposals, work contracts and such other information concerning the nature and cost of the alterations as may be reasonably requested by Landlord, including the identities and mailing addresses of all persons performing work or supplying materials. Landlord's right to review plans and specifications and to monitor construction shall be solely for its own benefit, and Landlord shall have no duty to ensure that such plans and specifications or construction comply with applicable Legal Requirements. Tenant shall cause, at its sole cost and expense, all Alterations to comply with insurance requirements and with Legal Requirements and shall implement at its sole cost and expense any alteration or modification required by Legal Requirements as a result of any Alterations. Tenant shall pay to Landlord, as Additional Rent, within 30 days after receipt of a reasonably detailed invoice specifying any reasonable out of pocket costs incurred by Landlord in connection with any Alteration that is not a Notice-Only Alteration. Before Tenant begins any Alteration, Landlord may post on and about the Premises notices of non-responsibility pursuant to applicable law. Tenant shall reimburse Landlord for, and indemnify and hold Landlord harmless from, any expense incurred by Landlord by reason of faulty work done by Tenant or its contractors, delays caused by such work, or inadequate cleanup.

Tenant shall furnish security or make other arrangements satisfactory to Landlord to assure payment for the completion of all Alterations work free and clear of liens, and shall provide (and cause each contractor or subcontractor to provide) certificates of insurance (in form and substance satisfactory to Landlord; form ACORD 28 [2006/07] is not satisfactory to Landlord) for workers' compensation and other coverage in amounts and from an insurance company satisfactory to Landlord protecting Landlord against liability for personal injury or property damage during construction. Upon completion of any Alterations, Tenant shall deliver to Landlord: (i) sworn statements setting forth the names of all contractors and subcontractors who did the work and final lien waivers from all such contractors and subcontractors; and (ii) "as built" plans for any such Alteration.

Other than (i) the items, if any, listed on **Exhibit F** attached hereto, (ii) any items agreed by Landlord in writing to be included on **Exhibit F** in the future, and (iii) any trade fixtures, machinery, equipment and other personal property not paid for out of the TI Fund (as defined in the Work Letter) which may be removed without material damage to the Premises, which damage shall be repaired (including capping or terminating utility hook-ups behind walls) by Tenant during the Term (collectively, "**Tenant's Property**"), all property of any kind paid for with the TI Fund, all Alterations, real property fixtures, built-in machinery and equipment, built-in casework and cabinets and other similar additions and improvements built into the Premises so as to become an integral part of the Premises, such as fume hoods which penetrate the roof or plenum area, built-in cold rooms, built-in warm rooms, walk-in cold rooms, walk-in warm rooms, deionized water systems, glass washing equipment, autoclaves, chillers, built-in plumbing, electrical and mechanical equipment and systems, and any power generator and transfer switch (collectively, "**Installations**") shall be and shall remain the property of Landlord during the Term and following the expiration or earlier termination of the Term, shall not be removed by Tenant at any time during the Term and shall remain upon and be surrendered with the Premises as a part thereof in accordance with Section 28 following the expiration or earlier termination of this Lease; provided, however, that Landlord shall, at the time its approval of such Installation is requested or at the time it receives notice of a Notice-Only Alteration, notify Tenant if it has elected to cause Tenant to remove such Installation upon the expiration or earlier termination of this Lease. If Landlord so elects, Tenant shall remove such Installation upon the expiration or earlier termination of this Lease and restore any damage caused by or occasioned as a result of such removal, including, when removing any of Tenant's Property which was plumbed, wired or otherwise connected to any of the Building Systems, capping off all such connections behind the walls of the Premises and repairing any holes. During any such restoration period, Tenant shall pay Rent to Landlord as provided herein as if said space were otherwise occupied by Tenant.

13. **Landlord's Repairs**. Landlord, as an Operating Expense, shall maintain all of the structural, exterior, parking and other Common Areas of the Project, including HVAC, plumbing, fire sprinklers, elevators and all other building systems serving the Premises and other portions of the Project ("**Building Systems**"), in good repair, reasonable wear and tear and uninsured losses and damages caused by Tenant, or by any of Tenant's agents, servants, employees, invitees and contractors (collectively, "**Tenant Parties**") excluded. Losses and damages caused by Tenant or any Tenant Party shall be repaired by Landlord, to the extent not covered by insurance, at Tenant's sole cost and expense. Landlord reserves the right to stop Building Systems services temporarily when necessary (i) by reason of accident or emergency, or (ii) for planned repairs, alterations or improvements, which are, in the judgment of Landlord, desirable or necessary to be made, until said repairs, alterations or improvements shall have been completed. Landlord shall have no responsibility or liability for failure to supply Building Systems services during any such period of interruption; provided, however, that Landlord shall, except in case of emergency, make a commercially reasonable effort to give Tenant 2 business days advance notice of any planned stoppage of Building Systems services for routine maintenance, repairs, alterations or improvements. Tenant shall promptly give Landlord written notice of any repair required by Landlord pursuant to this Section, after which Landlord shall have a reasonable opportunity to effect such repair. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance unless such failure shall persist for an unreasonable time after Tenant's written notice of the need for such repairs or maintenance. Tenant waives its rights under any state or local law to terminate this Lease or to make such repairs at Landlord's expense and agrees that the parties' respective rights with respect to such matters shall be solely as set forth herein. Repairs required as the result of fire, earthquake, flood,

vandalism, war, or similar cause of damage or destruction shall be controlled by Section 18. Landlord acknowledges that Tenant may have clearly delineated secure areas located within the Premises. Accordingly, notwithstanding any contrary provision contained in this Lease but subject to the emergency access rights described in this paragraph, Landlord and its agents, representatives, and contractors shall have the right to enter such secure areas only (a) by giving reasonable advance notice to Tenant and (b) when accompanied by Tenant or its representative. Tenant agrees to make such representative available to Landlord at all times.

14. **Tenant's Repairs**. Subject to Section 13 hereof, Tenant, at its expense, shall repair, replace and maintain in good condition all portions of the Premises, including, without limitation, entries, doors, ceilings, interior windows, interior walls, and the interior side of demising walls. Such repair and replacement may include capital expenditures and repairs whose benefit may extend beyond the Term. Should Tenant fail to make any such repair or replacement or fail to maintain the Premises, Landlord shall give Tenant notice of such failure. If Tenant fails to commence cure of such failure within 10 days of Landlord's notice, and thereafter diligently prosecute such cure to completion, Landlord may perform such work and shall be reimbursed by Tenant within 10 days after demand therefor; provided, however, that if such failure by Tenant creates or could create an emergency, Landlord may immediately commence cure of such failure and shall thereafter be entitled to recover the costs of such cure from Tenant. Subject to Sections 17 and 18, Tenant shall bear the full uninsured cost of any repair or replacement to any part of the Project that results from damage caused by Tenant or any Tenant Party and any repair that benefits only the Premises.

15. **Mechanic's Liens**. Tenant shall discharge, by bond or otherwise, any mechanic's lien filed against the Premises or against the Project for work claimed to have been done for, or materials claimed to have been furnished to, Tenant within 10 days after the filing thereof, at Tenant's sole cost and shall otherwise keep the Premises and the Project free from any liens arising out of work performed, materials furnished or obligations incurred by Tenant. Should Tenant fail to discharge any lien described herein, Landlord shall have the right, but not the obligation, to pay such claim or post a bond or otherwise provide security to eliminate the lien as a claim against title to the Project and the cost thereof shall be immediately due from Tenant as Additional Rent. If Tenant shall lease or finance the acquisition of office equipment, furnishings, or other personal property of a removable nature utilized by Tenant in the operation of Tenant's business, Tenant warrants that any Uniform Commercial Code Financing Statement filed as a matter of public record by any lessor or creditor of Tenant will upon its face or by exhibit thereto indicate that such Financing Statement is applicable only to removable personal property of Tenant located within the Premises. In no event shall the address of the Project be furnished on the statement without qualifying language as to applicability of the lien only to removable personal property, located in an identified suite held by Tenant.

16. **Indemnification**. Tenant hereby indemnifies and agrees to defend, save and hold Landlord harmless from and against any and all Claims for injury or death to persons or damage to property occurring within or about the Premises, arising directly or indirectly out of use or occupancy of the Premises or a breach or default by Tenant in the performance of any of its obligations hereunder, except to the extent caused by the willful misconduct or gross negligence of Landlord. Landlord shall not be liable to Tenant for, and Tenant assumes all risk of damage to, personal property (including, without limitation, loss of records kept within the Premises). Tenant further waives any and all Claims for injury to Tenant's business or loss of income relating to any such damage or destruction of personal property (including, without limitation, any loss of records). Landlord shall not be liable for any damages arising from any act, omission or neglect of any tenant in the Project or of any other third party.

17. **Insurance**. Landlord shall maintain all risk property and, if applicable, sprinkler damage insurance covering the full replacement cost of the Project. Landlord shall further procure and maintain commercial general liability insurance with a single loss limit of not less than $5,000,000 for bodily injury and property damage with respect to the Project. Landlord may, but is not obligated to, maintain such other insurance and additional coverages as it may deem necessary, including, but not limited to, flood, environmental hazard and earthquake, loss or failure of building equipment, errors and omissions, rental loss during the period of repair or rebuilding, workers' compensation insurance and fidelity bonds for

employees employed to perform services and insurance for any improvements installed by Tenant or which are in addition to the standard improvements customarily furnished by Landlord without regard to whether or not such are made a part of the Project. All such insurance shall be included as part of the Operating Expenses. The Project may be included in a blanket policy (in which case the cost of such insurance allocable to the Project will be determined by Landlord based upon the insurer's cost calculations). Tenant shall also reimburse Landlord for any increased premiums or additional insurance which Landlord reasonably deems necessary as a result of Tenant's use of the Premises.

Tenant, at its sole cost and expense, shall maintain during the Term: all risk property insurance with business interruption and extra expense coverage, covering the full replacement cost of all property and improvements installed or placed in the Premises by Tenant at Tenant's expense; workers' compensation insurance with no less than the minimum limits required by law; employer's liability insurance with such limits as required by law; and commercial general liability insurance, with a minimum limit of not less than $2,000,000 per occurrence for bodily injury and property damage with respect to the Premises. The commercial general liability insurance policy shall name Landlord and Alexandria Real Estate Equities, Inc., and its and their respective members, officers, directors, employees, managers, and agents (collectively, "**Landlord Parties**"), as additional insureds; insure on an occurrence and not a claims-made basis; be issued by insurance companies which have a rating of not less than policyholder rating of A and financial category rating of at least Class X in "Best's Insurance Guide"; shall not be cancelable for nonpayment of premium unless 30 days prior written notice shall have been given to Landlord from the insurer; contain a hostile fire endorsement and a contractual liability endorsement; and provide primary coverage to Landlord (any policy issued to Landlord providing duplicate or similar coverage shall be deemed excess over Tenant's policies). Copies of such policies (if requested by Landlord), or certificates of insurance (in form and substance reasonably satisfactory to Landlord; form ACORD 28 [2006/07] is not satisfactory to Landlord) showing the limits of coverage required hereunder and showing Landlord as an additional insured, along with reasonable evidence of the payment of premiums for the applicable period, shall be delivered to Landlord by Tenant upon commencement of the Term and upon each renewal of said insurance. Tenant's policy may be a "blanket policy" with an aggregate per location endorsement which specifically provides that the amount of insurance shall not be prejudiced by other losses covered by the policy. Tenant shall, at least 30 days prior to the expiration of such policies, furnish Landlord with renewal certificates.

In each instance where insurance is to name Landlord as an additional insured, Tenant shall upon written request of Landlord also designate and furnish certificates so evidencing Landlord as additional insured to: (i) any lender of Landlord holding a security interest in the Project or any portion thereof, (ii) the landlord under any lease wherein Landlord is tenant of the real property on which the Project is located, if the interest of Landlord is or shall become that of a tenant under a ground or other underlying lease rather than that of a fee owner, and/or (iii) any management company retained by Landlord to manage the Project.

The property insurance obtained by Landlord and Tenant shall include a waiver of subrogation by the insurers and all rights based upon an assignment from its insured, against Landlord or Tenant, and their respective officers, directors, employees, managers, agents, invitees and contractors ("**Related Parties**"), in connection with any loss or damage thereby insured against. Neither party nor its respective Related Parties shall be liable to the other for loss or damage caused by any risk insured against under property insurance required to be maintained hereunder, and each party waives any claims against the other party, and its respective Related Parties, for such loss or damage. The failure of a party to insure its property shall not void this waiver. Landlord and its respective Related Parties shall not be liable for, and Tenant hereby waives all claims against such parties for, business interruption and losses occasioned thereby sustained by Tenant or any person claiming through Tenant resulting from any accident or occurrence in or upon the Premises or the Project from any cause whatsoever. If the foregoing waivers shall contravene any law with respect to exculpatory agreements, the liability of Landlord or Tenant shall be deemed not released but shall be secondary to the other's insurer.

Landlord may require insurance policy limits to be raised to conform with requirements of Landlord's lender and/or to bring coverage limits to commercially reasonable levels then being generally required of new tenants within the Project.

18. **Restoration**. If, at any time during the Term, the Project or the Premises are damaged or destroyed by a fire or other insured casualty, Landlord shall notify Tenant within 60 days after discovery of such damage as to the amount of time Landlord reasonably estimates it will take to restore the Project or the Premises, as applicable ("**Restoration Period**"). If the Restoration Period is estimated to exceed 12 months ("**Maximum Restoration Period**"), Landlord may, in such notice, elect to terminate this Lease as of the date that is 75 days after the date of discovery of such damage or destruction; provided, however, that notwithstanding Landlord's election to restore, Tenant may elect to terminate this Lease by written notice to Landlord delivered within 5 business days of receipt of a notice from Landlord estimating a Restoration Period for the Premises longer than the Maximum Restoration Period. Unless either Landlord or Tenant so elects to terminate this Lease, Landlord shall, subject to receipt of sufficient insurance proceeds (with any deductible to be treated as a current Operating Expense), promptly restore the Premises (excluding the improvements installed by Tenant or by Landlord and paid for by Tenant), subject to delays arising from the collection of insurance proceeds, from Force Majeure events or as needed to obtain any license, clearance or other authorization of any kind required to enter into and restore the Premises issued by any Governmental Authority having jurisdiction over the use, storage, handling, treatment, generation, release, disposal, removal or remediation of Hazardous Materials (as defined in Section 30) in, on or about the Premises (collectively referred to herein as "**Hazardous Materials Clearances**"); provided, however, that if repair or restoration of the Premises is not substantially complete as of the end of the Maximum Restoration Period or, if longer, the Restoration Period, Landlord may, in its sole and absolute discretion but only if the failure to substantially complete such repair or restoration by such date is due to matters not within Landlord's control, elect not to proceed with such repair and restoration, or Tenant may by written notice to Landlord delivered within 5 business days of the expiration of the Maximum Restoration Period or, if longer, the Restoration Period, elect to terminate this Lease, in which event Landlord shall be relieved of its obligation to make such repairs or restoration and this Lease shall terminate as of the date that is 75 days after the later of: (i) discovery of such damage or destruction, or (ii) the date all required Hazardous Materials Clearances are obtained, but Landlord shall retain any Rent paid and the right to any Rent payable by Tenant prior to such election by Landlord or Tenant.

Tenant, at its expense, shall promptly perform, subject to delays arising from the collection of insurance proceeds, from Force Majeure (as defined in Section 34) events or to obtain Hazardous Material Clearances, all repairs or restoration not required to be done by Landlord and shall promptly re-enter the Premises and commence doing business in accordance with this Lease. Notwithstanding the foregoing, either Tenant or Landlord may terminate this Lease if the Premises are damaged during the last year of the Term and Landlord reasonably estimates that it will take more than 3 months to repair such damage, or if insurance proceeds are not available for such restoration. Rent shall be abated from the date all required Hazardous Material Clearances are obtained until the Premises are repaired and restored, in the proportion which the area of the Premises, if any, which is not usable by Tenant bears to the total area of the Premises, unless Landlord provides Tenant with other space during the period of repair that is suitable for the temporary conduct of Tenant's business. Such abatement shall be the sole remedy of Tenant, and except as provided in this Section 18, Tenant waives any right to terminate this Lease by reason of damage or casualty loss.

The provisions of this Lease, including this Section 18, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, or any other portion of the Project, and any statute or regulation which is now or may hereafter be in effect shall have no application to this Lease or any damage or destruction to all or any part of the Premises or any other portion of the Project, the parties hereto expressly agreeing that this Section 18 sets forth their entire understanding and agreement with respect to such matters.

19. **Condemnation**. If the whole or any material part of the Premises or the Project is taken for any public or quasi-public use under governmental law, ordinance, or regulation, or by right of eminent

domain, or by private purchase in lieu thereof (a "**Taking**" or "**Taken**"), and the Taking would either prevent or materially interfere with Tenant's use of the Premises or materially interfere with or impair Landlord's ownership or operation of the Project, then upon written notice by either Landlord or Tenant this Lease shall terminate and Rent shall be apportioned as of said date. If part of the Premises shall be Taken, and this Lease is not terminated as provided above, Landlord shall promptly restore the Premises and the Project as nearly as is commercially reasonable under the circumstances to their condition prior to such partial Taking and the rentable square footage of the Building, the rentable square footage of the Premises, Tenant's Share of Operating Expenses and the Rent payable hereunder during the unexpired Term shall be reduced to such extent as may be fair and reasonable under the circumstances. Upon any such Taking, Landlord shall be entitled to receive the entire price or award from any such Taking without any payment to Tenant, and Tenant hereby assigns to Landlord Tenant's interest, if any, in such award. Tenant shall have the right, to the extent that same shall not diminish Landlord's award, to make a separate claim against the condemning authority (but not Landlord) for such compensation as may be separately awarded or recoverable by Tenant for moving expenses and damage to Tenant's trade fixtures, if a separate award for such items is made to Tenant. Tenant hereby waives any and all rights it might otherwise have pursuant to any provision of state law to terminate this Lease upon a partial Taking of the Premises or the Project.

20. **Events of Default**. Each of the following events shall be a default ("**Default**") by Tenant under this Lease:

(a) **Payment Defaults**. Tenant shall fail to pay any installment of Rent or any other payment hereunder when due; provided, however, that Landlord will give Tenant notice and an opportunity to cure any failure to pay Rent within 5 business days of any such notice not more than once in any 12 month period and Tenant agrees that such notice shall be in lieu of and not in addition to, or shall be deemed to be, any notice required by law.

(b) **Insurance**. Any insurance required to be maintained by Tenant pursuant to this Lease shall be canceled or terminated or shall expire or shall be reduced or materially changed, or Landlord shall receive a notice of nonrenewal of any such insurance and Tenant shall fail to obtain replacement insurance at least 20 days before the expiration of the current coverage.

(c) **Abandonment**. Tenant shall abandon the Premises without (i) the release of the Premises of all Hazardous Materials Clearances and free of any residual impact from the Tenant HazMat Operations, and (ii) complying with the provisions of Section 28.

(d) **Improper Transfer**. Tenant shall assign, sublease or otherwise transfer or attempt to transfer all or any portion of Tenant's interest in this Lease or the Premises except as expressly permitted herein, or Tenant's interest in this Lease shall be attached, executed upon, or otherwise judicially seized and such action is not released within 90 days of the action.

(e) **Liens**. Tenant shall fail to discharge or otherwise obtain the release of any lien placed upon the Premises in violation of this Lease within 10 days after any such lien is filed against the Premises.

(f) **Insolvency Events**. Tenant or any guarantor or surety of Tenant's obligations hereunder shall: (A) make a general assignment for the benefit of creditors; (B) commence any case, proceeding or other action seeking to have an order for relief entered on its behalf as a debtor or to adjudicate it a bankrupt or insolvent, or seeking reorganization, arrangement, adjustment, liquidation, dissolution or composition of it or its debts or seeking appointment of a receiver, trustee, custodian or other similar official for it or for all or of any substantial part of its property (collectively a "**Proceeding for Relief**"); (C) become the subject of any Proceeding for Relief which is not dismissed within 90 days of its filing or entry; or (D) die or suffer a legal disability (if Tenant, guarantor, or surety is an individual) or be dissolved or otherwise fail to maintain its legal existence (if Tenant, guarantor or surety is a corporation, partnership or other entity).

(g) **Estoppel Certificate or Subordination Agreement.** Tenant fails to execute any document required from Tenant under Sections 23 or 27 within 5 days after a second notice requesting such document.

(h) **Other Defaults**. Tenant shall fail to comply with any provision of this Lease other than those specifically referred to in this Section 20, and, except as otherwise expressly provided herein, such failure shall continue for a period of 30 days after written notice thereof from Landlord to Tenant.

Any notice given under Section 20(h) hereof shall: (i) specify the alleged default, (ii) demand that Tenant cure such default, (iii) be in lieu of, and not in addition to, or shall be deemed to be, any notice required under any provision of applicable law, and (iv) not be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice; provided that if the nature of Tenant's default pursuant to Section 20(h) is such that it cannot be cured by the payment of money and reasonably requires more than 30 days to cure, then Tenant shall not be deemed to be in default if Tenant commences such cure within said 30 day period and thereafter diligently prosecutes the same to completion; provided, however, that such cure shall be completed no later than 60 days from the date of Landlord's notice.

21. **Landlord's Remedies**.

(a) **Interest**. Upon a Default by Tenant hereunder, Landlord may, until such Default is cured and without waiving or releasing any obligation of Tenant hereunder, make such payment or perform such act. All sums so paid or incurred by Landlord, together with interest thereon, from the date such sums were paid or incurred, at the annual rate equal to 12% per annum or the highest rate permitted by law ("**Default Rate**"), whichever is less, shall be payable to Landlord on demand as Additional Rent. Nothing herein shall be construed to create or impose a duty on Landlord to mitigate any damages resulting from Tenant's Default hereunder.

(b) **Late Payment Rent**. Late payment by Tenant to Landlord of Rent and other sums due will cause Landlord to incur costs not contemplated by this Lease, the exact amount of which will be extremely difficult and impracticable to ascertain. Such costs include, but are not limited to, processing and accounting charges and late charges which may be imposed on Landlord under any Mortgage covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within 5 days after the date such payment is due, Tenant shall pay to Landlord an additional sum of 6% of the overdue Rent as a late charge (provided that Tenant shall not be required to pay such late charge upon the first occurrence of a late payment by Tenant of Rent). The parties agree that this late charge represents a fair and reasonable estimate of the costs Landlord will incur by reason of late payment by Tenant. In addition to the late charge, Rent not paid when due shall bear interest at the Default Rate from the 5th day after the date due until paid.

(c) **Re-Entry**. Upon and during a Default by Tenant hereunder, Landlord shall have the right, immediately or at any time thereafter, without further notice to Tenant (unless otherwise provided herein), to enter the Premises, without terminating this Lease or being guilty of trespass, and do any and all acts as Landlord may deem necessary, proper or convenient to cure such Default, for the account and at the expense of Tenant, any notice to quit or notice of Landlord's intention to re-enter being hereby expressly waived, and Tenant agrees to pay to Landlord as Additional Rent all damage and/or expense incurred by Landlord in so doing, including interest at the Default Rate, from the due date until the date payment is received by Landlord.

(d) **Termination**. Landlord shall have the right to terminate this Lease and Tenant's right to possession of the Premises and, with or without legal process, take possession of the Premises and remove Tenant, any occupant and any property therefrom, using such force as may be necessary, without being guilty of trespass and without relinquishing any rights of Landlord against Tenant, any notice to quit, or notice of Landlord's intention to re-enter being hereby expressly waived. Landlord shall be entitled to recover damages from Tenant for all amounts covenanted to be paid during the remainder of the Term (except for the period of any holdover by Tenant, in which case the monthly rental rate stated at Section 8 herein shall apply), which may be accelerated by Landlord at its option, together with (i) all

expenses of any proceedings (including, but not limited to, legal expenses and attorney's fees) which may be necessary in order for Landlord to recover possession of the Premises, (ii) the expenses of the re-renting of the Premises (including, but not limited to, any commissions paid to any real estate agent, advertising expense and the costs of such alterations, repairs, replacements or modifications that Landlord, in its sole judgment, considers advisable and necessary for the purpose of re-renting), and (iii) interest computed at the Default Rate from the due date until paid; provided, however, that there shall be credited against the amount of such damages all amounts received by Landlord from such re-renting of the Premises, with any overage being refunded to Tenant. If Landlord elects to accelerate such amounts, such amounts shall be discounted to present value at a rate of interest equal to the then applicable Federal Funds Rate announced from time to time by the Federal Reserve Bank located nearest the Project. Landlord shall in no event be liable in any way whatsoever for failure to re-rent the Premises or, in the event that the Premises are re-rented, for failure to collect the rent thereof under such re-renting and Tenant expressly waives any duty of the Landlord to mitigate damages. No act or thing done by Landlord shall be deemed to be an acceptance of a surrender of the Premises, unless Landlord shall execute a written agreement of surrender with Tenant. Tenant's liability hereunder shall not be terminated by the execution of a new lease of the Premises by Landlord, unless that new lease expressly so states. In the event Landlord does not exercise its option to accelerate the payment of amounts owed as provided hereinabove, then Tenant agrees to pay to Landlord, upon demand, the amount of damages herein provided after the amount of such damages for any month shall have been ascertained; provided, however, that any expenses incurred by Landlord shall be deemed to be a part of the damages for the month in which they were incurred. Separate actions may be maintained each month or at other times by Landlord against Tenant to recover the damages then due, without waiting until the end of the term of this Lease to determine the aggregate amount of such damages. Tenant hereby expressly waives any and all rights of redemption granted by or under any present or future laws in the event of Tenant being evicted or being dispossessed for any cause, or in the event of Landlord obtaining possession of the Premises by reason of the violation by Tenant of any of the covenants and conditions of this Lease.

(e) **Lien for Rent**. Upon and during any Default by Tenant pursuant to Section 20(a), Landlord shall have a lien upon the property of Tenant in the Premises for the amount of such unpaid amounts, and Tenant hereby specifically waives any and all exemptions allowed by law. In such event, Tenant shall not remove any of Tenant's property from the Premises except with the prior written consent of Landlord, and Landlord shall have the right and privilege, at its option, to take possession of all Tenant's property in the Premises, to store the same on the Premises, or to remove it and store it in such place as may be selected by Landlord, at Tenant's risk and expense. If Tenant fails to redeem the personal property so seized, by payment of whatever sum may be due Landlord hereunder (including all storage costs), Landlord shall have the right, after twenty (20) days written notice to Tenant of its intention to do so, to sell such personal property so seized at public or private sale and upon such terms and conditions as may appear advantageous to Landlord, and after the payment of all proper charges incident to such sale, apply the proceeds thereof to the payment of any balance due to Landlord on account of rent or other obligations of Tenant pursuant to this Lease. In the event there shall then remain in the hands of Landlord any balance realized from the sale of said personal property, the same shall be paid over to Tenant. The exercise of the foregoing remedy by Landlord shall not relieve or discharge Tenant from any deficiency owed to Landlord which Landlord has the right to enforce pursuant to any of the provisions of this Lease. Tenant shall also be liable for all expenses incident to the foregoing process, including any auctioneer or attorney's fees or commissions.

(f) **Other Remedies**. In addition to the foregoing, Landlord, at its option, without further notice or demand to Tenant, shall have all other rights and remedies provided at law or in equity.

22. **Assignment and Subletting**.

(a) **General Prohibition**. Without Landlord's prior written consent subject to and on the conditions described in this Section 22, Tenant shall not, directly or indirectly, voluntarily or by operation of law, assign this Lease or sublease the Premises or any part thereof or mortgage, pledge, or hypothecate its leasehold interest or grant any concession or license within the Premises, and any attempt to do any of the foregoing shall be void and of no effect. If Tenant is a corporation, partnership or

limited liability company, the shares or other ownership interests thereof which are not actively traded upon a stock exchange or in the over-the-counter market, a transfer or series of transfers whereby 49% or more of the issued and outstanding shares or other ownership interests of such corporation are, or voting control is, transferred (but excepting transfers upon deaths of individual owners) from a person or persons or entity or entities which were owners thereof at time of execution of this Lease to persons or entities who were not owners of shares or other ownership interests of the corporation, partnership or limited liability company at time of execution of this Lease, shall be deemed an assignment of this Lease requiring the consent of Landlord as provided in this Section 22.

(b) **Permitted Transfers**. If Tenant desires to assign, sublease, hypothecate or otherwise transfer this Lease or sublet the Premises other than pursuant to a Permitted Assignment (as defined below), then at least 10 business days, but not more than 45 business days, before the date Tenant desires the assignment or sublease to be effective ("**Assignment Date**"), Tenant shall give Landlord a notice ("**Assignment Notice**") containing such information about the proposed assignee or sublessee, including the proposed use of the Premises and any Hazardous Materials proposed to be used, stored handled, treated, generated in or released or disposed of from the Premises, the Assignment Date, any relationship between Tenant and the proposed assignee or sublessee, and all material terms and conditions of the proposed assignment or sublease, including a copy of any proposed assignment or sublease in its final form, and such other information as Landlord may deem reasonably necessary or appropriate to its consideration whether to grant its consent. Landlord may, by giving written notice to Tenant within 15 business days after receipt of the Assignment Notice: (i) grant such consent, or (ii) refuse such consent, in its reasonable discretion (provided that Landlord shall further have the right to review and approve or disapprove the proposed form of sublease prior to the effective date of any such subletting). Tenant shall pay to Landlord a fee equal to $1,500 in connection with its consideration of any Assignment Notice and/or its preparation or review of any consent documents, and which fee shall comprise all of Landlord's attorneys' and other fees associated therewith.

Tenant shall have the right to assign this Lease, upon 30 days prior written notice to Landlord but without obtaining Landlord's prior written consent, to a corporation or other entity that is a successor-in-interest to Tenant, by way of merger, consolidation, or corporate reorganization, or by the purchase of all or substantially all of the assets or the ownership interests of Tenant provided that (i) such merger or consolidation, or such acquisition or assumption, as the case may be, is for a good business purpose and not principally for the purpose of transferring this Lease, (ii) the net worth (as determined in accordance with generally accepted accounting principles ("**GAAP**")) of the assignee is not less than the net worth (as determined in accordance with GAAP) of Tenant as of the date of Tenant's most current quarterly or annual financial statements, and (iii) such assignee shall agree in writing to assume all of the terms, covenants, and conditions of this Lease arising after the effective date of the assignment (a "**Permitted Assignment**").

Among other reasons, it shall be reasonable for Landlord to withhold its consent in any of these instances: (i) the proposed assignee or sublessee is engaged in areas of scientific research or other business concerns that are controversial, in Landlord's reasonable judgment, or Tenant's proposed use of the Premises will violate any applicable Legal Requirement, (ii) the proposed assignee or transferee lacks the creditworthiness to support the financial obligations it would incur under the proposed assignment or sublease, (iii) in Landlord's reasonable judgment, the use of the Premises by the proposed assignee or sublessee would require increased services by Landlord beyond those services required by all other tenants in the Building, (iv) Landlord has received from any other landlord to the proposed assignee or sublessee a negative report concerning such other landlord's experience with the proposed assignee or sublessee, (v) Landlord has experienced previous defaults by or is in litigation with the proposed assignee or sublessee, (vi) the proposed assignment will create a vacancy elsewhere in the Project, or (vii) the assignment or sublease is prohibited by Landlord's lender.

(c) **Additional Conditions**. As a condition to any such assignment or subletting, whether or not Landlord's consent is required, Landlord may require:

(i) that any assignee or subtenant agree, in writing at the time of such assignment or subletting, that if Landlord gives such party notice that Tenant is in default under this

Lease, such party shall thereafter make all payments otherwise due Tenant directly to Landlord, which payments will be received by Landlord without any liability except to credit such payment against those due under this Lease, and any such third party shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, in no event shall Landlord or its successors or assigns be obligated to accept such attornment; and

(ii) A list of Hazardous Materials, certified by the proposed assignee or sublessee to be true and correct, which the proposed assignee or sublessee intends to use, store, handle, treat, generate in or release or dispose of from the Premises, together with copies of all documents relating to such use, storage, handling, treatment, generation, release or disposal of Hazardous Materials by the proposed assignee or subtenant in the Premises or on the Project, prior to the proposed assignment or subletting, including, without limitation: permits; approvals; reports and correspondence; storage and management plans; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); and all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks. Neither Tenant nor any such proposed assignee or sublessee is required, however, to provide Landlord with any portion(s) of the such documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities.

(d) **No Release of Tenant, Sharing of Excess Rents**. Notwithstanding any assignment or subletting, Tenant and any guarantor or surety of Tenant's obligations under this Lease shall at all times remain fully and primarily responsible and liable for the payment of Rent and for compliance with all of Tenant's other obligations under this Lease. If the Rent due and payable by a sublessee or assignee (or a combination of the rental payable under such sublease or assignment plus any bonus or other consideration therefor or incident thereto in any form) exceeds the sum of the rental payable under this Lease, (excluding however, any Rent payable under this Section) and actual and reasonable brokerage fees, legal costs and any design or construction fees directly related to and required pursuant to the terms of any such sublease) ("**Excess Rent**"), then Tenant shall be bound and obligated to pay Landlord as Additional Rent hereunder 50% of such Excess Rent within 10 days following receipt thereof by Tenant. If Tenant shall sublet the Premises or any part thereof, Tenant hereby immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any such subletting, and Landlord as assignee for Tenant for the sole purpose of collecting such rent, or a receiver for Tenant appointed on Landlord's application, may collect such rent and apply it toward Tenant's obligations under this Lease; except that, until and during the occurrence of a Default, Tenant shall have the right to collect such rent.

(e) **No Waiver**. The consent by Landlord to an assignment or subletting shall not relieve Tenant or any assignees of this Lease or any sublessees of the Premises from obtaining the consent of Landlord to any further assignment or subletting nor shall it release Tenant or any assignee or sublessee of Tenant from full and primary liability under this Lease. The acceptance of Rent hereunder, or the acceptance of performance of any other term, covenant, or condition thereof, from any other person or entity shall not be deemed to be a waiver of any of the provisions of this Lease or a consent to any subletting, assignment or other transfer of the Premises.

(f) **Prior Conduct of Proposed Transferee.** Notwithstanding any other provision of this Section 22, if (i) the proposed assignee or sublessee of Tenant has been required by any prior landlord, lender or Governmental Authority to take remedial action in connection with Hazardous Materials contaminating a property, where the contamination resulted from such party's action or use of the property in question, (ii) the proposed assignee or sublessee is subject to an enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a

required reporting to any Governmental Authority), or (iii) because of the existence of a pre-existing environmental condition in the vicinity of or underlying the Project, the risk that Landlord would be targeted as a responsible party in connection with the remediation of such pre-existing environmental condition would be materially increased or exacerbated by the proposed use of Hazardous Materials by such proposed assignee or sublessee, Landlord shall have the absolute right to refuse to consent to any assignment or subletting to any such party.

23. **Estoppel Certificate**. Tenant shall, within 15 business days of written notice from Landlord, execute, acknowledge and deliver a statement in writing in any form reasonably requested by a proposed lender or purchaser, (i) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified is in full force and effect) and the dates to which the rental and other charges are paid in advance, if any, (ii) acknowledging that there are not any uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed, and (iii) setting forth such further information with respect to the status of this Lease or the Premises as may be requested thereon. Any such statement may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the real property of which the Premises are a part but by no other person. Tenant's failure to deliver such statement within such time shall, at the option of Landlord, be conclusive upon Tenant that this Lease is in full force and effect and without modification except as may be represented by Landlord in any certificate prepared by Landlord and delivered to Tenant for execution.

24. **Quiet Enjoyment**. So long as Tenant shall perform within any applicable cure periods after applicable notice all of the covenants and agreements herein required to be performed by Tenant, Tenant shall, subject to the terms of this Lease, at all times during the Term, have peaceful and quiet enjoyment of the Premises against any person claiming by, through or under Landlord.

25. **Prorations**. All prorations required or permitted to be made hereunder shall be made on the basis of the number of calendar days in each such month or year, as the case may be, that is to be prorated.

26. **Rules and Regulations**. Tenant shall, at all times during the Term and any extension thereof, comply with all reasonable rules and regulations at any time or from time to time established by Landlord covering use of the Premises and the Project and delivered to Tenant. The current rules and regulations are attached hereto as **Exhibit E**. If there is any conflict between said rules and regulations and other provisions of this Lease, the terms and provisions of this Lease shall control. Landlord shall not have any liability or obligation for the breach of any rules or regulations by other tenants in the Project and shall not enforce such rules and regulations in a discriminatory manner.

27. **Subordination**. This Lease and Tenant's interest and rights hereunder are hereby made and shall be subject and subordinate at all times to the lien of any Mortgage now existing or hereafter created on or against the Project or the Premises, and all amendments, restatements, renewals, modifications, consolidations, refinancing, assignments and extensions thereof, without the necessity of any further instrument or act on the part of Tenant; provided, however that so long as there is no Default hereunder, Tenant's right to possession of the Premises shall not be disturbed by the Holder of any such Mortgage. Tenant agrees, at the election of the Holder of any such Mortgage, to attorn to any such Holder. Tenant agrees upon demand to execute, acknowledge and deliver such instruments, confirming such subordination, and such instruments of attornment as shall be requested by any such Holder, provided any such instruments contain appropriate non-disturbance provisions assuring Tenant's quiet enjoyment of the Premises as set forth in Section 24 hereof. Notwithstanding the foregoing, any such Holder may at any time subordinate its Mortgage to this Lease, without Tenant's consent, by notice in writing to Tenant, and thereupon this Lease shall be deemed prior to such Mortgage without regard to their respective dates of execution, delivery or recording and in that event such Holder shall have the same rights with respect to this Lease as though this Lease had been executed prior to the execution, delivery and recording of such Mortgage and had been assigned to such Holder. On Tenant's written request, Landlord shall use its commercially reasonable efforts (but with no obligation to pay any out-of-pocket fees or sums) to obtain from any Holder of a first lien Mortgage at any time during the Term covering

any or all of the Project or the Premises a non-disturbance agreement on Holder's standard form in favor of Tenant assuring Tenant's quiet enjoyment of the Premises as set forth in Section 24 hereof. The term "**Mortgage**" whenever used in this Lease shall be deemed to include deeds of trust, security assignments and any other encumbrances, and any reference to the "**Holder**" of a Mortgage shall be deemed to include the beneficiary under a deed of trust.

28. **Surrender**. Upon the expiration of the Term or earlier termination of Tenant's right of possession, Tenant shall surrender the Premises to Landlord in the same condition as received, subject to any Alterations or Installations permitted by Landlord to remain in the Premises, free of Hazardous Materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Premises by any person other than a Landlord Party (collectively, "**Tenant HazMat Operations**") and released of all Hazardous Materials Clearances, broom clean, ordinary wear and tear and casualty loss and condemnation covered by Sections 18 and 19 excepted. At least 3 months prior to the surrender of the Premises, Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any Governmental Authority) to be taken by Tenant in order to surrender the Premises (including any Installations permitted by Landlord to remain in the Premises) at the expiration or earlier termination of the Term, free from any residual impact from the Tenant HazMat Operations and otherwise released for unrestricted use and occupancy ("**Surrender Plan**"). Such Surrender Plan shall be accompanied by a current listing of (i) all Hazardous Materials licenses and permits held by or on behalf of any Tenant Party with respect to the Premises, and (ii) all Hazardous Materials used, stored, handled, treated, generated, released or disposed of from the Premises, and shall be subject to the review and approval of Landlord's environmental consultant. In connection with the review and approval of the Surrender Plan, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning Tenant HazMat Operations as Landlord shall request. On or before such surrender, Tenant shall deliver to Landlord evidence that the approved Surrender Plan shall have been satisfactorily completed and Landlord shall have the right, subject to reimbursement at Tenant's expense as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the effective date of such surrender or early termination of this Lease, free from any residual impact from Tenant HazMat Operations. Tenant shall reimburse Landlord, as Additional Rent, for the actual out-of pocket expense incurred by Landlord for Landlord's environmental consultant to review and approve the Surrender Plan and to visit the Premises and verify satisfactory completion of the same, which cost shall not exceed $2,500. Landlord shall have the unrestricted right to deliver such Surrender Plan and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties.

If Tenant shall fail to prepare or submit a Surrender Plan approved by Landlord, or if Tenant shall fail to complete the approved Surrender Plan, or if such Surrender Plan, whether or not approved by Landlord, shall fail to adequately address any residual effect of Tenant HazMat Operations in, on or about the Premises, Landlord shall have the right to take such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Project are surrendered free from any residual impact from Tenant HazMat Operations, the cost of which actions shall be reimbursed by Tenant as Additional Rent, without regard to the limitation set forth in the first paragraph of this Section 28.

Tenant shall immediately return to Landlord all keys and/or access cards to parking, the Project, restrooms or all or any portion of the Premises furnished to or otherwise procured by Tenant. If any such access card or key is lost, Tenant shall pay to Landlord, at Landlord's election, either the cost of replacing such lost access card or key or the cost of reprogramming the access security system in which such access card was used or changing the lock or locks opened by such lost key. Any Tenant's Property, Alterations and property not so removed by Tenant as permitted or required herein shall be deemed abandoned and may be stored, removed, and disposed of by Landlord at Tenant's expense, and Tenant waives all claims against Landlord for any damages resulting from Landlord's retention and/or disposition of such property. All obligations of Tenant hereunder not fully performed as of the termination of the Term, including the obligations of Tenant under Section 30 hereof, shall survive the expiration or earlier termination of the Term, including, without limitation, indemnity obligations, payment obligations with respect to Rent and obligations concerning the condition and repair of the Premises.

29. **Waiver of Jury Trial**. TENANT AND LANDLORD WAIVE ANY RIGHT TO TRIAL BY JURY OR TO HAVE A JURY PARTICIPATE IN RESOLVING ANY DISPUTE, WHETHER SOUNDING IN CONTRACT, TORT, OR OTHERWISE, BETWEEN LANDLORD AND TENANT ARISING OUT OF THIS LEASE OR ANY OTHER INSTRUMENT, DOCUMENT, OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HEREWITH OR THE TRANSACTIONS RELATED HERETO.

30. **Environmental Requirements**.

(a) **Prohibition/Compliance/Indemnity**. Tenant shall not cause or permit any Hazardous Materials (as hereinafter defined) to be brought upon, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises or the Project in violation of applicable Environmental Requirements (as hereinafter defined) by Tenant or any Tenant Party. If Tenant breaches the obligation stated in the preceding sentence, or if the presence of Hazardous Materials in the Premises during the Term or any holding over results in contamination of the Premises, the Project or any adjacent property or if contamination of the Premises, the Project or any adjacent property by Hazardous Materials brought into, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises by anyone other than Landlord and Landlord's employees, agents and contractors otherwise occurs during the Term or any holding over, Tenant hereby indemnifies and shall defend and hold Landlord, its officers, directors, employees, agents and contractors harmless from any and all actions (including, without limitation, remedial or enforcement actions of any kind, administrative or judicial proceedings, and orders or judgments arising out of or resulting therefrom), costs, claims, damages (including, without limitation, punitive damages and damages based upon diminution in value of the Premises or the Project, or the loss of, or restriction on, use of the Premises or any portion of the Project), expenses (including, without limitation, reasonable attorneys', consultants' and experts' fees, court costs and amounts paid in settlement of any claims or actions), fines, forfeitures or other civil, administrative or criminal penalties, injunctive or other relief (whether or not based upon personal injury, property damage, or contamination of, or adverse effects upon, the environment, water tables or natural resources), liabilities or losses (collectively, "**Environmental Claims**") which arise during or after the Term as a result of such contamination. This indemnification of Landlord by Tenant includes, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup, treatment, remedial, removal, or restoration work required by any federal, state or local Governmental Authority because of Hazardous Materials present in the air, soil or ground water above, on, or under the Premises. Without limiting the foregoing, if the presence of any Hazardous Materials on the Premises, the Project or any adjacent property caused or permitted by Tenant or any Tenant Party results in any contamination of the Premises, the Project or any adjacent property, Tenant shall promptly take all actions at its sole expense and in accordance with applicable Environmental Requirements as are necessary to return the Premises, the Project or any adjacent property to the condition existing prior to the time of such contamination, provided that Landlord's approval of such action shall first be obtained, which approval shall not unreasonably be withheld so long as such actions would not potentially have any material adverse long-term or short-term effect on the Premises or the Project.

(b) **Business**. Landlord acknowledges that it is not the intent of this Section 30 to prohibit Tenant from using the Premises for the Permitted Use. Tenant may operate its business according to prudent industry practices so long as the use or presence of Hazardous Materials is strictly and properly monitored according to all then applicable Environmental Requirements. As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees to deliver to Landlord prior to the Commencement Date a list identifying each type of Hazardous Materials to be brought upon, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises and setting forth any and all governmental approvals or permits required in connection with the presence, use, storage, handling, treatment, generation, release or disposal of such Hazardous Materials on or from the Premises ("**Hazardous Materials List**"). Tenant shall deliver to Landlord an updated Hazardous Materials List at least once a year and shall also deliver an updated list before any new Hazardous Material is brought onto, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises. Tenant shall deliver to Landlord true and correct copies of the following documents ("**Haz Mat Documents**") relating to the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials prior to the Commencement Date, or if unavailable at that time,

concurrent with the receipt from or submission to a Governmental Authority: permits; approvals; reports and correspondence; storage and management plans, notice of violations of any Legal Requirements; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given Tenant its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks; and a Surrender Plan (to the extent surrender in accordance with Section 28 cannot be accomplished in 3 months). Tenant is not required, however, to provide Landlord with any portion(s) of the Haz Mat Documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities. It is not the intent of this Section to provide Landlord with information which could be detrimental to Tenant's business should such information become possessed by Tenant's competitors.

(c) **Tenant Representation and Warranty**. Tenant hereby represents and warrants to Landlord that (i) neither Tenant nor any of its legal predecessors has been required by any prior landlord, lender or Governmental Authority at any time to take remedial action in connection with Hazardous Materials contaminating a property which contamination was permitted by Tenant of such predecessor or resulted from Tenant's or such predecessor's action or use of the property in question, and (ii) Tenant is not subject to any enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority). If Landlord determines that this representation and warranty was not true as of the date of this lease, Landlord shall have the right to terminate this Lease in Landlord's sole and absolute discretion.

(d) **Testing**. Landlord shall have the right to conduct annual tests of the Premises to determine whether any contamination of the Premises or the Project has occurred as a result of Tenant's use. Subject to the provisions of this paragraph, Tenant shall be required to pay the cost of such annual test of the Premises; provided, however, that if Tenant conducts its own tests of the Premises using third party contractors and test procedures acceptable to Landlord which tests are certified to Landlord, Landlord shall accept such tests in lieu of the annual tests to be paid for by Tenant. In addition, at any time, and from time to time, prior to the expiration or earlier termination of the Term, Landlord shall have the right to conduct appropriate tests of the Premises and the Project to determine if contamination has occurred as a result of Tenant's use of the Premises. In connection with such testing, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such non-proprietary information concerning the use of Hazardous Materials in or about the Premises by Tenant or any Tenant Party. If contamination has occurred for which Tenant is liable under this Section 30, Tenant shall pay all costs to conduct such tests. If no such contamination is found, Landlord shall pay the costs of such tests (which shall not constitute an Operating Expense). Landlord shall provide Tenant with a copy of all third party, non-confidential reports and tests of the Premises made by or on behalf of Landlord during the Term without representation or warranty and subject to a confidentiality agreement. Tenant shall, at its sole cost and expense, promptly and satisfactorily remediate any environmental conditions identified by such testing in accordance with all Environmental Requirements. Landlord's receipt of or satisfaction with any environmental assessment in no way waives any rights which Landlord may have against Tenant.

(e) **Underground Tanks**. If underground or other storage tanks storing Hazardous Materials located on the Premises or the Project are used by Tenant or are hereafter placed on the Premises or the Project by Tenant, Tenant shall install, use, monitor, operate, maintain, upgrade and manage such storage tanks, maintain appropriate records, obtain and maintain appropriate insurance, implement reporting procedures, properly close any underground storage tanks, and take or cause to be taken all other actions necessary or required under applicable state and federal Legal Requirements, as such now exists or may hereafter be adopted or amended in connection with the installation, use, maintenance, management, operation, upgrading and closure of such storage tanks.

(f) **Tenant's Obligations**. Tenant's obligations under this Section 30 shall survive the expiration or earlier termination of this Lease. During any period of time after the expiration or earlier

termination of this Lease required by Tenant or Landlord to complete the removal from the Premises of any Hazardous Materials (including, without limitation, the release and termination of any licenses or permits restricting the use of the Premises and the completion of the approved Surrender Plan), Tenant shall continue to pay the full Rent in accordance with this Lease for any portion of the Premises not relet by Landlord in Landlord's sole discretion, which Rent shall be prorated daily.

(g) **Definitions**. As used herein, (i) the term "**Environmental Requirements**" means all applicable present and future statutes, regulations, ordinances, rules, codes, judgments, orders or other similar enactments of any Governmental Authority regulating or relating to health, safety, or environmental conditions on, under, or about the Premises or the Project, or the environment, including without limitation, the following: the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; and all state and local counterparts thereto, and any regulations or policies promulgated or issued thereunder, and (ii) the term "**Hazardous Materials**" means and includes any substance, material, waste, pollutant, or contaminant listed or defined as hazardous or toxic, or regulated by reason of its impact or potential impact on humans, animals and/or the environment under any Environmental Requirements, asbestos and petroleum, including crude oil or any fraction thereof, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). As defined in Environmental Requirements, Tenant is and shall be deemed to be the "**operator**" of Tenant's "**facility**" and the "**owner**" of all Hazardous Materials brought on the Premises by Tenant or any Tenant Party, and the wastes, by-products, or residues generated, resulting, or produced therefrom.

31. **Tenant's Remedies/Limitation of Liability**. Landlord shall not be in default hereunder unless Landlord fails to perform any of its obligations hereunder within 30 days after written notice from Tenant specifying such failure (unless such performance will, due to the nature of the obligation, require a period of time in excess of 30 days, then after such period of time as is reasonably necessary). Upon any default by Landlord, Tenant shall give notice by registered or certified mail to any Holder of a Mortgage covering the Premises and to any landlord of any lease of property in or on which the Premises are located and Tenant shall offer such Holder and/or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Project by power of sale or a judicial action if such should prove necessary to effect a cure; provided Landlord shall have previously furnished to Tenant in writing the names and addresses of all such persons who are to receive such notices. All obligations of Landlord hereunder shall be construed as covenants, not conditions; and, except as may be otherwise expressly provided in this Lease, Tenant may not terminate this Lease for breach of Landlord's obligations hereunder.

Notwithstanding the foregoing, if any claimed Landlord default hereunder will immediately, materially, and adversely affect Tenant's ability to conduct its business in the Premises (a "**Material Landlord Default**"), Tenant shall, as soon as reasonably possible, but in any event within 2 business days of obtaining knowledge of such claimed Material Landlord Default, give Landlord written notice of such claim and telephonic notice to Tenant's principal contact with Landlord. Landlord shall then have 2 business days to commence cure of such claimed Material Landlord Default and shall diligently prosecute such cure to completion. If such claimed Material Landlord Default is not a default by Landlord hereunder, or if Tenant failed to give Landlord the notice required hereunder within 2 business days of learning of the conditions giving rise to the claimed Material Landlord Default, Landlord shall be entitled to recover from Tenant, as Additional Rent, any costs incurred by Landlord in connection with such cure in excess of the costs, if any, that Landlord would otherwise have been liable to pay hereunder. If Landlord fails to commence cure of any claimed Material Landlord Default as provided above, Tenant may commence and prosecute such cure to completion, and shall be entitled to recover the costs of such cure (but not any consequential or other damages) from Landlord, to the extent of Landlord's obligation to cure such claimed Material Landlord Default hereunder, subject to the limitations set forth in the immediately preceding sentence of this paragraph and the other provisions of this Lease.

All obligations of Landlord under this Lease will be binding upon Landlord only during the period of its ownership of the Premises and not thereafter. The term "**Landlord**" in this Lease shall mean only the owner for the time being of the Premises. Upon the transfer by such owner of its interest in the

Premises, such owner shall thereupon be released and discharged from all obligations of Landlord thereafter accruing, but such obligations shall be binding during the Term upon each new owner for the duration of such owner's ownership.

32. **Inspection and Access**. Landlord and its agents, representatives, and contractors may enter the Premises at any reasonable time to inspect the Premises and to make such repairs as may be required or permitted pursuant to this Lease and for any other business purpose. Landlord and Landlord's representatives may enter the Premises during business hours on not less than 2 business days advance written notice (except in the case of emergencies in which case no such notice shall be required and such entry may be at any time) for the purpose of effecting any such repairs, inspecting the Premises, showing the Premises to prospective purchasers and, during the last year of the Term, to prospective tenants or for any other business purpose. Landlord may erect a suitable sign on the Project stating the Premises are available to let or that the Project is available for sale. Landlord may grant easements, make public dedications, designate Common Areas and create restrictions on or about the Project, provided that no such easement, dedication, designation or restriction materially, adversely affects Tenant's use or occupancy of the Premises for the Permitted Use. At Landlord's request, Tenant shall execute such instruments as may be necessary for such easements, dedications or restrictions. Tenant shall at all times, except in the case of emergencies, have the right to escort Landlord or its agents, representatives, contractors or guests while the same are in the Premises, provided such escort does not materially and adversely affect Landlord's access rights hereunder.

33. **Security**. Tenant acknowledges and agrees that security devices and services, if any, while intended to deter crime may not in given instances prevent theft or other criminal acts and that Landlord is not providing any security services with respect to the Premises. Tenant agrees that Landlord shall not be liable to Tenant for, and Tenant waives any claim against Landlord with respect to, any loss by theft or any other damage suffered or incurred by Tenant in connection with any unauthorized entry into the Premises or any other breach of security with respect to the Premises. Tenant shall be solely responsible for the personal safety of Tenant's officers, employees, agents, contractors, guests and invitees while any such person is in, on or about the Premises and/or the Project. Tenant shall at Tenant's cost obtain insurance coverage to the extent Tenant desires protection against such criminal acts.

34. **Force Majeure**. Except for the payment of Rent, neither Landlord nor Tenant shall be responsible or liable for delays in the performance of its obligations hereunder when caused by, related to, or arising out of acts of God, strikes, lockouts, or other labor disputes, embargoes, quarantines, disruptive or unseasonal weather, national, regional, or local disasters, calamities, or catastrophes, inability to obtain labor or materials (or reasonable substitutes therefor) at reasonable costs or failure of, or inability to obtain, utilities necessary for performance, governmental restrictions, orders, limitations, regulations, controls, or moratoria (unless either party, through its acts or omissions, prompted or triggered such governmental restrictions, orders, limitations, regulations, controls, or moratoria), national emergencies, delay in issuance or revocation of permits (unless either party, through its acts or omissions, prompted or triggered such delay), enemy or hostile governmental action, terrorism, insurrection, riots, civil disturbance or commotion, fire or other casualty, and other causes or events beyond the reasonable control of Landlord (collectively, "**Force Majeure**").

35. **Brokers**. Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with this transaction and that no Broker brought about this transaction, other than Scheer Partners, Inc. ("**Scheer**"). Scheer shall be paid by Landlord pursuant to a separate agreement between Landlord and Scheer. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims (including the reimbursement of reasonable attorneys' fees) by any Broker, other than Scheer, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this leasing transaction.

36. **Limitation on Landlord's Liability.** NOTWITHSTANDING ANYTHING SET FORTH HEREIN OR IN ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT TO THE

CONTRARY: (A) LANDLORD SHALL NOT BE LIABLE TO TENANT OR ANY OTHER PERSON FOR (AND TENANT AND EACH SUCH OTHER PERSON ASSUME ALL RISK OF) LOSS, DAMAGE OR INJURY, WHETHER ACTUAL OR CONSEQUENTIAL TO: TENANT'S PERSONAL PROPERTY OF EVERY KIND AND DESCRIPTION, INCLUDING, WITHOUT LIMITATION TRADE FIXTURES, EQUIPMENT, INVENTORY, SCIENTIFIC RESEARCH, SCIENTIFIC EXPERIMENTS, LABORATORY ANIMALS, PRODUCT, SPECIMENS, SAMPLES, AND/OR SCIENTIFIC, BUSINESS, ACCOUNTING AND OTHER RECORDS OF EVERY KIND AND DESCRIPTION KEPT AT THE PREMISES AND ANY AND ALL INCOME DERIVED OR DERIVABLE THEREFROM; (B) THERE SHALL BE NO PERSONAL RECOURSE TO LANDLORD FOR ANY ACT OR OCCURRENCE IN, ON OR ABOUT THE PREMISES OR ARISING IN ANY WAY UNDER THIS LEASE OR ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT WITH RESPECT TO THE SUBJECT MATTER HEREOF AND ANY LIABILITY OF LANDLORD HEREUNDER SHALL BE STRICTLY LIMITED SOLELY TO LANDLORD'S INTEREST IN THE PROJECT OR ANY PROCEEDS FROM SALE OR CONDEMNATION THEREOF AND ANY INSURANCE PROCEEDS PAYABLE IN RESPECT OF LANDLORD'S INTEREST IN THE PROJECT OR IN CONNECTION WITH ANY SUCH LOSS; AND (C) IN NO EVENT SHALL ANY PERSONAL LIABILITY BE ASSERTED AGAINST ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS. UNDER NO CIRCUMSTANCES SHALL LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS BE LIABLE FOR INJURY TO TENANT'S BUSINESS OR FOR ANY LOSS OF INCOME OR PROFIT THEREFROM.

37. **Severability**. If any clause or provision of this Lease is illegal, invalid or unenforceable under present or future laws, then and in that event, it is the intention of the parties hereto that the remainder of this Lease shall not be affected thereby. It is also the intention of the parties to this Lease that in lieu of each clause or provision of this Lease that is illegal, invalid or unenforceable, there be added, as a part of this Lease, a clause or provision as similar in effect to such illegal, invalid or unenforceable clause or provision as shall be legal, valid and enforceable. This Lease, including the exhibits attached hereto, constitutes the entire agreement between Landlord and Tenant pertaining to the subject matter hereof and supersedes all prior agreements, understandings, letters of intent, negotiations, and discussions, whether oral or written, of the parties, and there are no warranties, representations, or other agreements, express or implied, made to either party by the other party in connection with the subject matter hereof except as specifically set forth herein or in the documents delivered pursuant hereto or in connection herewith.

38. **Signs; Exterior Appearance**. Tenant shall not, without the prior written consent of Landlord, which may be granted or withheld in Landlord's sole discretion: (i) attach any awnings, exterior lights, decorations, balloons, flags, pennants, banners, painting or other projection to any outside wall of the Project, (ii) use any curtains, blinds, shades or screens other than Landlord's standard window coverings, (iii) coat or otherwise sunscreen the interior or exterior of any windows, (iv) place any bottles, parcels, or other articles on the window sills, (v) place any equipment, furniture or other items of personal property on any exterior balcony, or (vi) paint, affix or exhibit on any part of the Premises or the Project any signs, notices, window or door lettering, placards, decorations, or advertising media of any type which can be viewed from the exterior of the Premises. Interior signs on doors and the directory tablet shall be inscribed, painted or affixed for Tenant by Landlord at the sole cost and expense of Landlord, and shall be of a size, color and type acceptable to Landlord. Nothing may be placed on the exterior of corridor walls or corridor doors other than Landlord's standard lettering. The directory tablet shall be provided exclusively for the display of the name and location of tenants. Landlord shall provide Tenant, at Tenant's cost, Tenant's Share of space located on the highest elevation of the existing monument sign at the Project.

39. **Roof Equipment**. As long as Tenant is not in Default under this Lease, Tenant shall have the right, subject to compliance with all Legal Requirements, to install, maintain, and remove on the top of the roof of the Building (located directly above the Premises and based on Tenant's proportionate share of space available on the roof of the Building) one or more satellite dishes, communication antennae, or other equipment (all of which having a diameter and height acceptable to Landlord) for the transmission or reception of communication of signals as Tenant may from time to time desire (collectively, the "Roof Equipment") on the following terms and conditions:

(a) **Requirements**. Tenant shall submit to Landlord (i) the plans and specifications for the installation of the Roof Equipment, (ii) copies of all required governmental and quasi-governmental permits, licenses, and authorizations that Tenant will and must obtain at its own expense, with the cooperation of Landlord, if necessary for the installation and operation of the Roof Equipment, and (iii) an insurance policy or certificate of insurance evidencing insurance coverage as required by this Lease and any other insurance as reasonably required by Landlord for the installation and operation of the Roof Equipment. Landlord shall not unreasonably withhold or delay its approval for the installation and operation of the Roof Equipment; provided, however, that Landlord may reasonably withhold its approval if the installation or operation of the Roof Equipment (A) may damage the structural integrity of the Building, (B) may void, terminate, or invalidate any applicable roof warranty, (C) may interfere with any service provided by Landlord or any tenant of the Building, (D) may reduce the leaseable space in the Building, or (E) is not properly screened from the viewing public.

(b) **No Damage to Roof**. If Tenant or its agents shall cause any damage to the roof during the installation, operation, and removal of the Roof Equipment such damage shall be repaired promptly at Tenant's expense and the roof shall be restored in the same condition it was in before the damage. Landlord shall not charge Tenant Additional Rent for the installation and use of the Roof Equipment. If, however, Landlord's insurance premium or Tax assessment increases as a result of the Roof Equipment, Tenant shall pay such increase as Additional Rent within 10 days after receipt of a reasonably detailed invoice from Landlord. Tenant shall not be entitled to any abatement or reduction in the amount of Rent payable under this Lease if for any reason Tenant is unable to use the Roof Equipment. In no event whatsoever shall the installation, operation, maintenance, or removal of the Roof Equipment by Tenant or its agents void, terminate, or invalidate any applicable roof warranty.

(c) **Protection**. The installation, operation, and removal of the Roof Equipment shall be at Tenant's sole risk. Tenant shall indemnify, defend, and hold Landlord harmless from and against any and all claims, costs, damages, liabilities and expenses (including, but not limited to, reasonable attorneys' fees) of every kind and description that may arise out of or be connected in any way with Tenant's installation, operation, or removal of the Roof Equipment.

(d) **Removal**. At the expiration or earlier termination of this Lease, Tenant shall, at its sole cost and expense, remove the Roof Equipment from the Building. Tenant shall leave the portion of the roof where the Roof Equipment was located in good order and repair, reasonable wear and tear excepted. If Tenant does not so remove the Roof Equipment, Tenant hereby authorizes Landlord to remove and dispose of the Roof Equipment and charge Tenant as Additional Rent for all costs and expenses incurred by Landlord in such removal and disposal. Tenant agrees that Landlord shall not be liable for any Roof Equipment or related property disposed of or removed by Landlord.

(e) **No Interference**. The Roof Equipment shall not interfere with the proper functioning of any telecommunications equipment or devices that have been installed by or for any other tenant of the Building before the date of the installation of the Roof Equipment. Tenant acknowledges that other tenant(s) may have approval rights over the installation and operation of telecommunications equipment and devices on or about the roof, and that Tenant's right to install and operate the Roof Equipment is subject and subordinate to the rights of such other tenants. Tenant agrees that any other tenant of the Building that currently has or in the future takes possession of any portion of the Building will be permitted to install such telecommunication equipment that is of a type and frequency that will not cause unreasonable interference to the Roof Equipment.

(f) **Relocation**. Landlord shall have the right, at its expense and after 60 days prior notice to Tenant, to relocate the Roof Equipment to another site on the roof of the Building as long as such site reasonably meets Tenant's sight line and interference requirements and does not unreasonably interfere with Tenant's use and operation of the Roof Equipment.

(g) **Access**. Landlord grants to Tenant the right of ingress and egress on a 24 hour 7 day per week basis to install, operate, and maintain the Roof Equipment. Before receiving access to the roof of the Building, Tenant shall give Landlord at least 24 hours' advance written or oral notice, except in emergency situations, in which case 2 hours' advance oral notice shall be given by Tenant. Landlord shall supply Tenant with the name, telephone, and pager numbers of the contact individual(s) responsible for providing access during emergencies.

(h) **Appearance**. If required by Legal Requirements, the Roof Equipment shall be painted the same color as the Building so as to render the Roof Equipment virtually invisible from ground level.

(i) **No Assignment**. The right of Tenant to use and operate the Roof Equipment shall be personal solely to GlycoMimetics, Inc., and (i) no other person or entity shall have any right to use or operate the Roof Equipment, and (ii) Tenant shall not assign, convey, or otherwise transfer to any person or entity any right, title, or interest in all or any portion of the Roof Equipment or the use and operation thereof.

(j) **Taxes; Fees**. Tenant shall promptly pay all taxes and license fees imposed by any Governmental Authority in connection with the installation, operation and maintenance of any Roof Equipment.

40. **Right to Extend Term**. Tenant shall have the right to extend the Term of this Lease upon the following terms and conditions:

(a) **Extension Rights**. Tenant shall have one consecutive right ("**Extension Right**") to extend the term of this Lease for 5 years ("**Extension Term**") on the same terms and conditions as this Lease (other than Base Rent) by giving Landlord written notice of its election to exercise the Extension Right at least 9 months prior, and no earlier than 15 months prior, to the expiration of the Base Term of this Lease.

Base Rent shall be adjusted on the commencement date of the Extension Term and on each anniversary of the commencement of the Extension Term by multiplying the Base Rent payable immediately before such adjustment by the Rent Adjustment Percentage and adding the resulting amount to the Base Rent payable immediately before such adjustment. In addition, Landlord may impose a market rent for the parking rights provided hereunder.

(b) **Rights Personal**. The Extension Right is personal to Tenant and, except in connection with any Permitted Assignment of this Lease, is not assignable without Landlord's consent, which consent may be granted or withheld in Landlord's sole discretion separate and apart from any consent by Landlord to an assignment of Tenant's interest in this Lease.

(c) **Exceptions**. Notwithstanding anything set forth above to the contrary, the Extension Right shall not be in effect and Tenant may not exercise the Extension Right: (i) during any period of time that Tenant is in Default under any provision of this Lease; or (ii) if Tenant has been in Default under any provision of this Lease 3 or more times, whether or not the Defaults are cured, during the 12 month period immediately prior to the date that Tenant intends to exercise the Extension Right, regardless of whether the Defaults are cured.

(d) **No Extensions**. The period of time within which the Extension Right may be exercised shall not be extended or enlarged by reason of Tenant's inability to exercise the Extension Right.

(e) **Termination**. The Extension Right shall terminate and be of no further force or effect even after Tenant's due and timely exercise of the Extension Right, if, after such exercise, but prior to the commencement date of the Extension Term, (i) Tenant fails to timely cure any default by Tenant under this Lease; or (ii) Tenant has Defaulted 3 or more times during the period from the date of the exercise of the Extension Right to the date of the commencement of the Extension Term, regardless of whether such Defaults are cured.

41. **Miscellaneous**.

(a) **Notices**. All notices or other communications between the parties shall be in writing and shall be deemed duly given upon delivery or refusal to accept delivery by the addressee thereof if delivered in person, or upon actual receipt if delivered by reputable overnight guaranty courier, addressed and sent to the parties at their addresses set forth above in the Basic Lease Provisions. Landlord and Tenant may from time to time by written notice to the other designate another address for receipt of future notices.

(b) **Joint and Several Liability**. If and when included within the term "**Tenant**," as used in this instrument, there is more than one person or entity, each shall be jointly and severally liable for the obligations of Tenant.

(c) **Financial Information**. Tenant shall furnish Landlord with true and complete copies of Tenant's most recent audited (if available) and unaudited annual financial statements within 90 days of the end of each of Tenant's fiscal years during the Term. The unaudited annual financial statements shall be subject to adjustment but shall nonetheless be correct and complete in all material respects and fairly present the results of the operations of Tenant for the periods indicated. During any period of Default by Tenant, Tenant shall within 10 days after request therefor by Landlord furnish Landlord with additional financial information or summaries that Tenant typically provides to its lenders or shareholders.

(d) **Recordation**. Neither this Lease nor a memorandum of lease shall be filed by or on behalf of Tenant in any public record. Landlord may prepare and file, and upon request by Landlord Tenant will execute, a memorandum of lease, but any such recordation shall be at Landlord's sole cost and expense.

(e) **Interpretation**. The normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Lease or any exhibits or amendments hereto. Words of any gender used in this Lease shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires. The captions inserted in this Lease are for convenience only and in no way define, limit or otherwise describe the scope or intent of this Lease, or any provision hereof, or in any way affect the interpretation of this Lease.

(f) **Not Binding Until Executed**. The submission by Landlord to Tenant of this Lease shall have no binding force or effect, shall not constitute an option for the leasing of the Premises, nor confer any right or impose any obligations upon either party until execution of this Lease by both parties.

(g) **Limitations on Interest**. It is expressly the intent of Landlord and Tenant at all times to comply with applicable law governing the maximum rate or amount of any interest payable on or in connection with this Lease. If applicable law is ever judicially interpreted so as to render usurious any interest called for under this Lease, or contracted for, charged, taken, reserved, or received with respect to this Lease, then it is Landlord's and Tenant's express intent that all excess amounts theretofore collected by Landlord be credited on the applicable obligation (or, if the obligation has been or would thereby be paid in full, refunded to Tenant), and the provisions of this Lease immediately shall be deemed reformed and the amounts thereafter collectible hereunder reduced, without the necessity of the execution of any new document, so as to comply with the applicable law, but so as to permit the recovery of the fullest amount otherwise called for hereunder.

(h) **Choice of Law**. Construction and interpretation of this Lease shall be governed by the internal laws of the state in which the Premises are located, excluding any principles of conflicts of laws.

(i) **Time**. Time is of the essence as to the performance of Tenant's obligations under this Lease.

(j) **OFAC**. Tenant, and all beneficial owners of Tenant, are currently (i) in compliance with and shall at all times during the Term of this Lease remain in compliance with the regulations of the Office of Foreign Assets Control ("**OFAC**") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "**OFAC Rules**"), (ii) not listed on, and shall not during the Term of this Lease be listed on, the Specially Designated Nationals and Blocked Persons List maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (iii) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.

(k) **Incorporation by Reference**. All exhibits and addenda attached hereto are hereby incorporated into this Lease and made a part hereof. If there is any conflict between such exhibits or addenda and the terms of this Lease, such exhibits or addenda shall control.

(l) **No Accord and Satisfaction**. No payment by Tenant or receipt by Landlord of a lesser amount than the monthly installment of Base Rent or any Additional Rent will be other than on account of the earliest stipulated Base Rent and Additional Rent, nor will any endorsement or statement on any check or letter accompanying a check for payment of any Base Rent or Additional Rent be an accord and satisfaction. Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or to pursue any other remedy provided in this Lease.

(m) **Hazardous Activities**. Notwithstanding any other provision of this Lease, Landlord, for itself and its employees, agents and contractors, reserves the right to refuse to perform any repairs or services in any portion of the Premises which, pursuant to Tenant's routine safety guidelines, practices or custom or prudent industry practices, require any form of protective clothing or equipment other than safety glasses. In any such case, Tenant shall contract with parties who are acceptable to Landlord, in Landlord's reasonable discretion, for all such repairs and services, and Landlord shall, to the extent required, equitably adjust Tenant's Share of Operating Expenses in respect of such repairs or services to reflect that Landlord is not providing such repairs or services to Tenant.

(n) **Confidentiality**. Tenant agrees that the terms of this Lease are confidential and constitute proprietary information of Landlord, and that disclosure of the terms hereof could adversely affect the ability of Landlord to negotiate with other tenants. Tenant and its partners, officers, directors, employees, agents, real estate brokers, and sales persons and attorneys shall not disclose the terms of this Lease to any other person without Landlord's prior written consent (which consent may be denied in Landlord's sole and absolute subjective discretion), except to (a) any accountants of Tenant in connection with the preparation of Tenant's financial statements or tax returns, (b) to an assignee of this Lease or sublessee of the Premises, (c) to an entity or person to whom disclosure is required by Legal Requirements or in connection with any action brought to enforce this Lease, (d) Tenant's consultants, agents, architects, or attorneys representing Tenant in connection with this Lease, or (e) any Governmental Authority involved in any investigation into the compliance of the Premises or the Project with the Legal Requirements.

[Signatures on next page]

IN WITNESS WHEREOF, Landlord and Tenant have executed this Lease as of the day and year first above written.

TENANT:

GLYCOMIMETICS, INC.,
a Delaware corporation

By: Rachel K. King
Its: CEO

LANDLORD:

ARE-QRS CORP.,
a Maryland corporation

By:
Its: SVP – General Counsel

EXHIBIT A TO LEASE
DESCRIPTION OF PREMISES

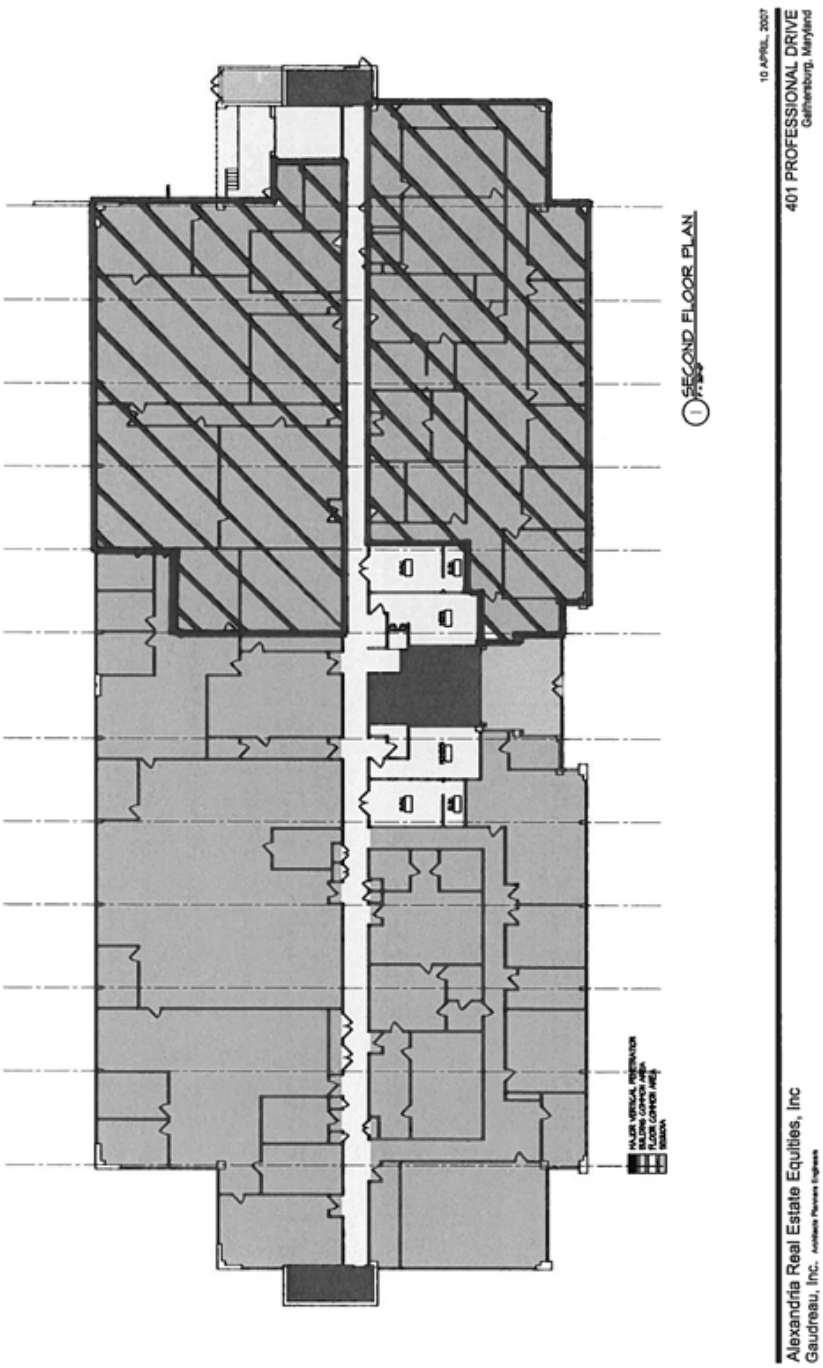


EXHIBIT B TO LEASE
DESCRIPTION OF PROJECT

All that lot or parcel of land in the 9th Election District of Montgomery County, Maryland and described as follows:

Lot 1, Block B, in the Subdivision known as "Gaithersburg North Research & Development Center" as per Plat recorded in Plat Book 138 at Plat 15921, among the Land Records of Montgomery County, Maryland

Parcel I.D. No. 9-201-2636295

EXHIBIT C TO LEASE
WORK LETTER

June 4, 2010
401 Professional Drive
Gaithersburg, MD 20878
GlycoMimetics
Design Intent Work Letter

14,425 SF

General Conditions –

Project Manager (3 weeks) and Job site superintendent supervision (8 weeks) are included in the scope of work. Fine clean and administrative coverage associated with O&M, permitting and contract/documents.

Demolition –

The scope of work will include:

- Removal of walls as required by the attached Glycomimetics floor plan (furnished by Tom Zeberlin received June 1, 2010) are included.
- Removal of visible carpet and VCT flooring as required for replacement.
- Removal and salvage of existing doors for reuse.
- All ceiling tiles will be removed for replacement.

Concrete, Fire Safing, Roofing –

The scope of work will include:

- Core drilling will be provided as needed to accommodate new pantry and lab sinks as well as drain for glass wash.
- Roofing repair and flashings will be installed as required to accommodate condensing units for supplemental AC units and cold room condensing units.

Millwork & Carpentry –

The scope of work will include:

- Plastic Laminate Millwork: 14 linear feet of new plastic laminate casework and countertops in pantry.
- Laboratory Casework:
    - One hundred forty eight linear feet (relocated cabinets refurbished from demo’d stock of 113 assumed in total footage, 35 linear feet of new base sink cabinets) of new metal laboratory casework will be installed, similar to the existing casework.
    - 113 linear foot of casework will be relocated, refurbished and reused in the suite.
    - Metal casework refurbishment will include cleaning, spot sanding and electro-static repainting of both the inner and outer areas of the cabinets.
    - Furnish and install 1100 square feet of new phenolic resin tops (728 linear feet of existing cabinets to receive new tops, existing sinks and faucets to remain and be cleaned, new sinks to be greater than 20” wide with a depth of at least 16 (sixteen) inches.
    - Existing (to remain) fume hoods to be cleaned; the metal exteriors will be refurbished, similar to the metal cabinets.
    - New sinks and faucets will be provided at new sink islands shown on Glycomimetics floor plan.
    - All existing safety and casework (unless otherwise noted) to be existing to remain.
    - Furnish and install five (5) lab sinks and associated casework and piping (tenant to reimburse landlord $18,550)

Doors, Frames, Hardware and Glass –

The scope of work will include:

- Re-install 13 existing doors and hardware.
- Furnish and install 16 new doors and frames (to match building standard) ; hollow metal knock down frames with solid core wood stain grade birch doors.
- Furnish and install 12 independent side light frames (measurements 12”x80” – outside dimension hollow metal). Furnish and install 2 (two) new suite entry hardware, 6 (six) interior latch sets, 29 (twenty nine) lock sets Schlage (or like) Athens series cylindrical prep. Furnish and install 8 (eight) 2x4 viewing windows from corridor to lab.
- Orbital hardware to be replaced per code with lever sets.
- New double glass entry door with store front and ADA compliant egress exit hardware.

Partitions –

The scope of work will include:

- Per the attached Glycomimetics floor plan (furnished by Tom Zeberlin, received June 4, 2010) furnish and install new demising partition to separate tenant from other space on the floor. This partition will be full height to the underside of the roof deck; All new interior partitions are to extend from the slab to the underside of existing ceiling grid
- Full height partitions will be installed at the conference rooms and three (3) large offices along the east wall.
- Existing partitions will be patched and repaired as required and repainted.
- Wall assembly to be 2 1/2” metal studs with 18” OC stud separation, drywall to be 1/2”. No walls to receive insulation.

Ceilings –

The scope of work will include:

- Furnish and install new Armstrong 755B 2x4 ceiling tile throughout the entire tenant area.
- All existing ceiling grids will remain and be repaired and be repainted.
- New ceiling systems will be installed in the Tissue Culture, Storage, microscopy, Hydrogenation and Glasswash rooms.

Painting –

The scope of work will include:

- Painting of all existing partitions throughout suite with two coats of flat latex paint
- All new partitions to receive two coats of flat latex paint.
- All ceiling grid to be repainted if needed.
- All existing and new door frames and side light frames will be painted.

Flooring –

The scope of work will include:

- Furnish and install new carpet flooring throughout the office suite, using J&J Invision (or equal) commercial density carpet (Series: Alias, Assurance, Frequency, Fuse, Integrity, Jackpot, Mix, Merge, Fuse or Solutions).
- Furnish and install new 4” vinyl cove base by Johnsonite (or like) throughout the entire tenant space.
- Furnish and install new 12”x12” vinyl composite tile (manufacturer: AZ Rock) throughout the entire laboratory area.

Equipment –

The scope of work will include:

- A card reader allowance is included (5 Datawatch entry points).
- Glass wash (including to provide regular water supply utility to) under counter 115V Flaskscrubber® Item Number 4420320 (or equal).
- Two new refurbished 6’ (6 foot) fume hoods.
- ANSIZ9.5 compliant inspections and balancing on all existing hoods.
- Cold room allowance (10’x6’x8’ walk in freezer with floor) with three (3) horsepower condensing unit.

HVAC –

The scope of work will include:

- 18 (eighteen) new diffusers (tied into existing building systems assumed to be functional and adequate),
- 16 (sixteen) new return air grills, set two thermostats.
- Furnish and install two new supplemental AC units (one to supply {cooling only air} at conference rooms A&B, one to supply {cooling only air} to the LAN room).
- Furnish and install 3 (three) exhaust fans.
- Relocate 20 (twenty) diffusers.
- Air balance area of construction to comply with City of Gaithersburg building permit requirements.
- Repair roof top units allowance.
- Perimeter fan coil replacement (quantity four).

Plumbing –

The scope of work will include:

- Furnish and install new pantry rough in and sink including drain and hot and cold water (point of use (Insta-hot or like).
- Furnish and install new sinks at new laboratory benches where shown on the plan.
- Plumbing wrap PVC with fire wrap as needed to meet code.

Life Safety (Sprinkler) –

The scope of work will include:

- Furnish and install sprinkler heads as required by the attached Glycomimetics floor (furnished by Tom Zeberlein, received June 4, 2010.
- One dry pendant is included for the cold room.

Electrical –

LIGHTING

The scope of work will include:

- Provide and install (60) sixty new prismatic 4 lamp 2x4 light fixtures.
- Relocate (70) seventy existing 2x4 light fixtures.
- Re-lamp and/or re-ballast (20) twenty existing 2x4 light fixtures.
- Relocate (10) ten existing 2x2 light fixtures.
- Provide and install (13) thirteen standard exit light fixtures.
- Provide and install (34) thirty four ceiling mounted dual technology occupancy sensor switches.
- Provide and install (29) twenty nine wall mounted dual technology occupancy sensor switches.
- Provide and install (5) five standard switches.
- Provide and install (2) two 3 way switches.

POWER

The scope of work will include:

- Install (2) two GFI receptacles.
- Install (60) sixty duplex receptacles.
- Install (7) seven junction boxes with circuitry and make the electrical connections to the owner-furnished furniture whip.
- Provide power and make the electrical connections to the garbage disposal.
- Provide power and make the electrical connections to the instant hot.
- Install (1) one dedicated receptacle for the microwave.
- Install (20) twenty new 20 amp 120 volt circuits.
- Install (23) twenty three ring & strings for the voice/data devices.
- Install (30) thirty dedicated 20 amp 208 volt circuits for the equipment.
- Provide power and make the electrical connections to the AC-1 & CU-1.
- Provide power and make the electrical connections to the cold box.
- Install (1) one roof-top GFI receptacles.
- Install (2) two dedicated quad receptacles.
- Install (1) one 30 amp 208 volt receptacle for the server.
- Back up generator available power is 100AMPs, 120/208V, however NO pricing is included related to that work).

FIRE ALARM

The scope of work will include:

- Provide and install (9) nine new Wheelock strobe devices.
- Provide and install (1) one new Wheelock Smoke Detector.
- Provide and install (14) fourteen Wheelock bell/strobe devices.
- Provide and install (1) one new Silent Knight Expander Panel.
- Submittals and permit are included.
- Scope excludes synchronization module or replacement of existing fire alarm devices.

Architectural/Engineering/Permitting –

The scope of work will include:

- Provide Architectural and Engineering plans in accordance with landlord approval.
- A/E meetings will include three (3) meetings with the tenant.
- Obtain building and trade permits.

EXCLUSIONS –

Pricing excludes all data and telephone wiring or demo of existing low voltage wiring. Any and all furniture (including but not limited to lab equipment shown on the plans and systems furniture) are to be provided by the tenant.

Pricing assumes: existing building systems to be operational and sufficient to supply: hot and cold air, water and power. Assumes generator is configured correctly with proper power over current protection.

Alternates to the pricing include:

Alternate #1 DI Plumbing allowance (The **main components** within deionized water system are as follows:

1 (quantity) Pressure Reducing Valve, Pressure Gauges, 1 (quantity) 20" x ¾" Filter Housing (wall mounted), 1 (quantity) 20 Micron Prefilter Element, 1 (quantity) 1.2 cu. ft. Organic Adsorption (Carbon) Tank, 1 (quantity), Multi-stage Distribution pump, 2 (quantity), 2.2 cu. ft. Mixed Bed Deionizers, 1 (quantity) 2 Megohm Indicator Light w/ Housing, 1 (quantity) Ultraviolet Purifier with 254nm Bulb (wall mounted), 1 (quantity) 20" x ¾" Filter Housing, all natural (wall mounted) with .2 micron postfilter (FPN922EGS), 1 (quantity) Digital Resistivity Monitor-loop supply only (wall mounted). Materials, Freight, Installation labor Included. Training included. **Natural Polypropylene High Purity Distribution Piping Loop.** Serpentine in design to feed four sinks and one glass-washer. ***This budget pricing is based upon 450' total linear footage (including the drops.)*** The loop will be supported with V-channel. The method of fusion is socket-welding via heat-fusion. Minimal dead-legs at each drop per the FDA guidelines. All materials, ball valves, piping & fittings included. Freight included. Sanitization of the loop & system with Minncare Disinfectant included.

RRR

SCALE: 3/32" = 1'-0"

Second Floor Plan

401 Professional Drive
Gaithersburg, Maryland

GlycoMimetics

8 June, 2010
Gaudreau, Inc.
Architects Planners Engineers

RKK

SCALE: 3/32" = 1'-0"

Second Floor Plan

401 Professional Drive
Gaithersburg, Maryland

GlycoMimetics

8 June, 2010
Gaudreau, Inc.
Architects Planners Engineers

EXHIBIT D TO LEASE
ACKNOWLEDGMENT OF COMMENCEMENT DATE

This **ACKNOWLEDGMENT OF COMMENCEMENT DATE** is made as of this day of , 2010, between **ARE-QRS, INC**., a Maryland corporation ("**Landlord**"), and **GLYCOMIMETICS, INC**., a Delaware corporation ("**Tenant**"), and is attached to and made a part of the Lease dated as of June , 2010 ("**Lease**"), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

Landlord and Tenant hereby acknowledge and agree that the Commencement Date of the Base Term of the Lease is June , 2010, the Rent Commencement Date for Base Rent and Operating Expenses is , 2010 (subject to the applicable abatement set forth in Section 4(a) of the Lease), and the expiration date of the Base Term of the Lease shall be midnight on , . In case of a conflict between the terms of the Lease and the terms of this Acknowledgement of Commencement Date, this Acknowledgement of Commencement Date shall control for all purposes.

IN WITNESS WHEREOF, Landlord and Tenant have executed this ACKNOWLEDGMENT OF COMMENCEMENT DATE to be effective on the date first above written.

TENANT:
GLYCOMIMETICS, INC.,
a Delaware corporation

By: _____
Its: _____

LANDLORD:
ARE-QRS CORP.,
a Maryland corporation

By: _____
Its: _____

EXHIBIT E TO LEASE

Rules and Regulations

1. The sidewalk, entries, and driveways of the Project shall not be obstructed by Tenant, or any Tenant Party, or used by them for any purpose other than ingress and egress to and from the Premises.

2. Tenant shall not place any objects, including antennas, outdoor furniture, etc., in the parking areas, landscaped areas or other areas outside of its Premises, or on the roof of the Project.

3. Except for animals assisting the disabled, no animals shall be allowed in the offices, halls, or corridors in the Project.

4. Tenant shall not disturb the occupants of the Project or adjoining buildings by the use of any radio or musical instrument or by the making of loud or improper noises.

5. If Tenant desires telegraphic, telephonic or other electric connections in the Premises, Landlord or its agent will direct the electrician as to where and how the wires may be introduced; and, without such direction, no boring or cutting of wires will be permitted. Any such installation or connection shall be made at Tenant's expense.

6. Tenant shall not install or operate any steam or gas engine or boiler, or other mechanical apparatus in the Premises, except as specifically approved in the Lease. The use of oil, gas or inflammable liquids for heating, lighting or any other purpose is expressly prohibited. Explosives or other articles deemed extra hazardous shall not be brought into the Project.

7. Parking any type of recreational vehicles is specifically prohibited on or about the Project. Except for the overnight parking of operative vehicles, no vehicle of any type shall be stored in the parking areas at any time. In the event that a vehicle is disabled, it shall be removed within 48 hours. There shall be no "For Sale" or other advertising signs on or about any parked vehicle. All vehicles shall be parked in the designated parking areas in conformity with all signs and other markings. All parking will be open parking, and no reserved parking, numbering or lettering of individual spaces will be permitted except as specified by Landlord.

8. Tenant shall maintain the Premises free from rodents, insects and other pests.

9. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs or who shall in any manner do any act in violation of the Rules and Regulations of the Project.

10. Tenant shall not cause any unnecessary labor by reason of Tenant's carelessness or indifference in the preservation of good order and cleanliness. Landlord shall not be responsible to Tenant for any loss of property on the Premises, however occurring, or for any damage done to the effects of Tenant by the janitors or any other employee or person.

11. Tenant shall give Landlord prompt notice of any defects in the water, lawn sprinkler, sewage, gas pipes, electrical lights and fixtures, heating apparatus, or any other service equipment affecting the Premises.

12. Tenant shall not permit storage outside the Premises, including without limitation, outside storage of trucks and other vehicles, or dumping of waste or refuse or permit any harmful materials to be placed in any drainage system or sanitary system in or about the Premises.

13. All moveable trash receptacles provided by the trash disposal firm for the Premises must be kept in the trash enclosure areas, if any, provided for that purpose.

14. No auction, public or private, will be permitted on the Premises or the Project.

15. No awnings shall be placed over the windows in the Premises except with the prior written consent of Landlord.

16. The Premises shall not be used for lodging, sleeping or cooking or for any immoral or illegal purposes or for any purpose other than that specified in the Lease. No gaming devices shall be operated in the Premises.

17. Tenant shall ascertain from Landlord the maximum amount of electrical current which can safely be used in the Premises, taking into account the capacity of the electrical wiring in the Project and the Premises and the needs of other tenants, and shall not use more than such safe capacity. Landlord's consent to the installation of electric equipment shall not relieve Tenant from the obligation not to use more electricity than such safe capacity.

18. Tenant assumes full responsibility for protecting the Premises from theft, robbery and pilferage.

19. Tenant shall not install or operate on the Premises any machinery or mechanical devices of a nature not directly related to Tenant's ordinary use of the Premises and shall keep all such machinery free of vibration, noise and air waves which may be transmitted beyond the Premises.

EXHIBIT F TO LEASE
TENANT'S PERSONAL PROPERTY

Asset ID	Description
1	Autoclave.sterilizer
10	Biosafety tissue culture hood 4'
101	Peristaltic pump with signal cable
102	Peristaltic pump P-1
104	Whirlpool Refrigerator
105	Undercounter refrigerator
106	Glassdoor Chromatography Refrigerator
107	Roller Bottle apparatus
108	DU-640 Spectrophotometer
11	Biosafety tissue culture hood 6'
110	VHS HI-FI Video recorder/cell flow
111	Time/Date Generator/Cell Flow
114	13" VCR/TV Monitor with case
115	Circulating Waterbath
116	Circulating Waterbath
117	Waterbath Model 1255
119	Nanopure Water Filtration Syst.
12	HPLC equipment
13	HPLC and accessories
132	Ektaprint 90 Copier with sorter
134	Paper Fax
135	3 Panasonic 2-Line; 6 AT&T 725 line
136	Paper shredder
14	HPLC and accessories
16	Tissue Culture Incubator
17	Tissue Culture Incubator
18	Tissue Culture Incubator
19	Tissue Culture Incubator
194	Conference Library Tables
197	Mahogany desk
198	Drafting stools
199	Green executive High-back chair
2	Hollow fiber bioreactor
20	Incubator - insect cells
200	Lab bench
201	CLC chair/Guest chairs
205	8 Mahogany lateral file cabinets
206	Lab furniture for Tis. culture lab
208	2 Mahogany desks
21	Incubator
210	Framed posters
211	18 Mahogany bookshelves
213	Chairs for conference room (6)
214	4 used chairs for conference room
216	Blue swivel chairs for technicians
217	Gray desks (2) for technicians
218	Fireproof filing cabinet (4 drawer)
219	8 used Blue chairs for conference room
22	Absorbance monitor/optical unit
224	Lab furniture
225	Bookshelf and file combo(Magnani)
226	Lab stools
228	2 Executive and 2 side chairs
230	Gray desk with right hand pedestal
231	Gray fabric chairs for microscope work
233	Furn Mart Bookshelves
234	Fireproof cabinet
24	Minprotean & power supply
25	Shaker flask/inc
27	Fraction collector

28	Roto-evaporator
29	Roto-evaporator
3	Centrifuge and rotors
30	Sequencing gel system
32	Cell-porator system
33	Cell-porator voltage booster
34	Horizontal gel apparatus
35	Wheaton cell-gro &stirrer
36	Environmental shaker/combo
38	12 channel pipette
39	Trans-blot semi-dry cell
4	Centrifuge/rotors
40	PCR temperature cycler
41	Reacti-therm heating/stirring
44	Orbit shaker junior w/combo platform
45	Power supply
46	Dionex PAD detector / interface card
47	Fraction collector
48	Pipettor- 8 channel
49	Fraction collector
5	Centrifuge
50	Bio-Dot microfiltation system
51	UV monitor molecular biology
52	Flow cell 3mm & filters monitor
53	Fraction collector
54	System recorder
56	HPLC column slurry packer
58	RC-Mini Reservoir and Cell concentra
6	Centrifuge/rotors
60	Model 84400 Stirred cell
62	Cellulose Cartridge + Flowpath
63	DC1K15 Refrigerated Circulating waterbath
64	Mini Protean II Cell
65	Cellulose Cartridge + Tubing,Caps
66	Gilson Fraction collector
67	3M2 Cartridge with modified flow
68	Gilson Fraction collector
69	Model III Mini IEF Cell
7	Microcentrifuge
70	Powerpac 100 Power supply
71	Spectrum Medical Stirred cell concen
72	Econo Buffer Selector
73	Stratalinker UV Crosslinker
74	Spectrum Medical Stirred cell 70 ml
75	Cole Parmer Pump drive with pump head
77	Tiss.Cul. Counter top Hood
78	Spectrofluorometer LS50B
79	Linomat IV with Twin trough
80	Planarchromat 2.5/0.15 Microscope lens
81	Microscope/Hoffman phase
82	ICM 405 Microscope/camera
83	Televal 3 Inverted Microscope/TC
84	Photography attach. for Univ. Micros.
85	Dage MTI Camera 72 with control panel
86	Stemi 2000c stero Microscope/stand
87	pH Meter with probe
89	P-200 Pipetman
9	Freezer -80
90	Cytofluor plate reader
92	Bio-Tek Instrum.plate washer
98	Vacuum pump

99	Welsh vacuum pump
GMI000030	Microbalance
GMI000040	Mettler with broken glass shield
GMI000050	Refrigerator
GMI000060	Shandon, Cytospin, Model 3
GMI000070	Genios Microplate Reader
GMI000130	VWR Economy Vacuum/Oven
GMI000160	Cryoplus 2, Liquid Nitrogen Storage Unit (includes delivery and installation)
GMI000180	Plate Washer
GMI000250	Liquid Nitrogen 80 Freezer w/LN2 backup system and delivery charges
GMI000270	Hydrofunction Apparatus
GMI000280	Flexi-Dry MP, 3 liter, -85C Freeze Dryer
GMI000290	Extraction Manifold for hydrofunction apparatus
GMI000300	Auto Temperature Controller for hydrofunction apparatus
GMI000350	Vacuum Pump
GMI000360	Chromatography Refrigerator w/sliding glass doors
GMI000370	Shredder
GMI000410	VWR Sheldon Microprocessor vacuum oven
GMI000420	Mettler 220G/31G
GMI000430	Tharo H434 label printer
GMI000460	Biosafety cabinet and Base
GMI000470	Economy incubator model 1510E
GMI000490	BOC Edwards E-Lab2 Vacuum Pump and Trap
GMI000510	Buschi Rotary Evaporator Model #R-205CR 20/40
GMI000520	Two Fire Proof Cabinets
GMI000550	Flammable Liquid Storage Cabinet
GMI000570	Buchi Rotary Evaporator (R-200CR)
GMI000580	KNF Chemically Resistant Vacuum Pump
GMI000590	Shimadzu HPLC Machine
GMI000660	Edwards vacuum pump
GMI000690	Joauan Thelco Oven Model 70
GMI000730	Edward vacuum pump
GMI000740	Oil mist filter for Edwards vacuum pump
GMI000750	KNF chemical resistant pump
GMI000780	Cabinet to store flammable liquid chemicals
GMI000790	Eppendorf microcentrifuge model 5415D
GMI000800	IFC LP70Plus projector
GMI000810	Ceramic Hot Plate Midi
GMI000820	Edwards Vacuum Pump Ser#066021961
GMI000830	Oil Mist filter - KNF vacuum pump
GMI000840	R-200CR rotary evaporator
GMI000850	KNF Chemical Resistant Pump
GMI000920	KNF oil free vacuum pump
GMI000930	2 Brinkmann/Buchi RC210C Rotary Evaporator
GMI000970	LC Mass Sepc SL Package with pumps & loops
GMI001000	Xerox Color Copier
GMI001010	Edwards RV8/5 vacuum pump ser#66276686
GMI001020	Edwards RV8/5 vacuum pump ser#66279219
GMI001030	Edwards RV8/5 vacuum pump ser#66273947
GMI001040	Edwards RV8/5 vacuum pump ser#66294262
GMI001080	Edwards R340 Vacuum Pump ser # 066232103
GMI001090	KNF oil-free chem resistant single stage vacuum pump
GMI001100	HPLC machine
GMI001130	VWR Syringe Infusison Pump Model 780100, Ser # 106350
GMI001180	Savant Speed Vacuum PO1682
GMI001230	VWR 12 channel pipettor - PO1850
GMI001240	RET basic Hot Plate/Stirrer - PO 1864
GMI001250	Lateral Fireproof Filing Cabinet (PO1863)
GMI001300	explosion-proof freezer
GMI001330	Flasklink Wireless temperature monitoring system for freezers PO 2006
GMI001340	VWR Explosion Proof Freezer PO1922

GMI001420	Mettler-Toledo Lab Balance - PO#2081
GMI001450	Combiflash System S/N 207E20009
GMI001500	Fireking fireproof filing cabinet (Drug Dev)
GMI001510	Fireking fireproof filing cabinet (CR9219)
GMI001530	IKA basic stirring hotplate (P02407)
GMI001540	Used Office Furniture - Dir. Clincal Ops (CR9309)
GMI001560	Hon 700 Series Storage cabinet w/ lateral file
GMI001570	Fireking Fireprooof Cabinet with lateral files 4 drawer
GMI001580	Scotsman Flake Ice Maker with Bin (Lab)
GMI001600	Modular Furniture - Inv 8667
GMI001680	Furniture BH 10638 (used Furniture)
GMI001690	Oil Bath & Temperature Controller
GMI001700	Drying Oven for Glassware
GMI001710	Oil Bath Temperature Controller P02700
GMI001720	Buchi RotoVaporator (P02742)
GMI001730	Buchi Vacumm Pump V700 (P02746)

ACKNOWLEDGMENT OF COMMENCEMENT DATE

This **ACKNOWLEDGMENT OF COMMENCEMENT DATE** is made as of this 5 day of November, 2010, between **ARE-QRS, INC**., a Maryland corporation ("**Landlord**"), and **GLYCOMIMETICS, INC**., a Delaware corporation ("**Tenant**"), and is attached to and made a part of the Lease dated as of July 1, 2010, as amended by the First Amendment to Lease dated as of September 21, 2010 (collectively, the "**Lease**"), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

Landlord and Tenant hereby acknowledge and agree that the Commencement Date of the Base Term of the Lease is July 1, 2010, the Rent Commencement Date for Base Rent and Operating Expenses is October 22, 2010 (subject to the applicable abatement set forth in Section 4(a) of the Lease), and the expiration date of the Base Term of the Lease shall be midnight on October 31, 2015. In case of a conflict between the terms of the Lease and the terms of this Acknowledgement of Commencement Date, this Acknowledgement of Commencement Date shall control for all purposes.

IN WITNESS WHEREOF, Landlord and Tenant have executed this ACKNOWLEDGMENT OF COMMENCEMENT DATE to be effective on the date first above written.

TENANT:
GLYCOMIMETICS, INC.,
a Delaware corporation

By: /s/ Rachel K. King
Its: CEO

LANDLORD:
ARE-QRS CORP.,
a Maryland corporation

By: /s/ Jennifer Pappas
JENNIFER PAPPAS
Its: **SVP - GENERAL COUNSEL**

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE (this "**First Amendment**") is made as of September 21, 2010 by and between **ARE-QRS CORP,** a Maryland corporation ("**Landlord**") and **GLYCOMIMETICS, INC.**, a Delaware corporation ("**Tenant**").

RECITALS

A. Landlord and Tenant are parties to that certain Lease Agreement dated as of July 1, 2010 (the "**Lease**"). Pursuant to the Lease, Tenant leases approximately 14,425 rentable square feet identified as Suite 250 in a building located at 401 Professional Drive, Gaithersburg Maryland (the "**Original Premises**). Capitalized terms used herein without definition shall have the meanings defined for such terms in the Lease.

B. Landlord and Tenant desire, subject to the terms and conditions set forth herein to, among other things, increase the rentable area of the Original Premises by 573 rentable square feet ("**Expansion Space**") to 14,998 rentable square feet.

NOW, THEREFORE, in consideration of the foregoing Recitals, which are incorporated herein by this reference, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. Changes to Defined Terms. The following amendments are hereby made to definitions contained on page 1 of the Lease in the Basic Lease Provisions:

(a) The defined term "**Premises**" shall be deleted in its entirety and replaced with the following:

"**Premises**: That portion of the Project, containing approximately 14,998 rentable square feet, as determined by Landlord, as shown on Exhibit A. Gaudreau, Inc., Landlord's architect, has measured the area of the Premises pursuant to the 1996 Standard Method of Measuring Floor Area in Office Buildings as adopted by the Building Owners and Managers Association (ANSI/BOMA 265.1- 1996) ("BOMA Standards"). Tenant acknowledges receipt of such measurement and confirms that (a) Tenant has had an opportunity to confirm such measurement with an architect of its selection before the Commencement Date, and (b) such measurement shall be conclusive as to the area of the Premises. Landlord covenants and agrees, irrespective of any change in the BOMA Standards subsequent to the Commencement Date, that Landlord shall not remeasure the Premises during the Term."

(b) The defined term "**Rentable Area of the Premises**" shall mean 14,998 rentable square feet;

(c) The defined term "**Base Rent**" shall mean $29,996 per month; and

(d) The defined term "**Tenant's Share of Operating Expenses**" shall mean 23.75%.

2. Exhibit A. Exhibit A to the Lease is hereby deleted in its entirety and replaced with Exhibit A to this Second Amendment.

3. Landlord's Work. The terms "**Landlord's Work**" and "**Work Letter**" shall include the work of constructing the improvements to the Expansion Space described on Exhibit B hereto.

4. Broker. Landlord and Tenant each represent and warrant that it has not dealt with any broker, agent or other person (collectively "Broker") in connection with the transaction reflected in this First Amendment other than Scheer Partners, Inc., and that no Broker other than Scheer Partners, Inc., who shall be paid by Landlord pursuant to a separate agreement, brought about this transaction. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker other than Scheer Partners, Inc., claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this leasing transaction.

5. Miscellaneous.

(a) This First Amendment is the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous oral and written agreements and discussions. This First Amendment may be amended only by an agreement in writing, signed by the parties hereto.

(b) This First Amendment is binding upon and shall inure to the benefit of the parties hereto, their respective agents, employees, representatives, officers, directors, divisions, subsidiaries, affiliates, assigns, heirs, successors in interest and shareholders.

(c) This First Amendment may be executed in any number of counterparts, each of which shall be deemed an original, but all of which when taken together shall constitute one and the same instrument. The signature page of any counterpart may be detached therefrom without impairing the legal effect of the signature(s) thereon provided such signature page is attached to any other counterpart identical thereto except having additional signature pages executed by other parties to this First Amendment attached thereto.

(d) Except as amended and/or modified by this First Amendment, the Lease is hereby ratified and confirmed and all other terms of the Lease shall remain in full force and effect, unaltered and unchanged by this First Amendment. In the event of any conflict between the provisions of this First Amendment and the provisions of the Lease, the provisions of this First Amendment shall prevail. Whether or not specifically amended by this First Amendment, all of the terms and provisions of the Lease are hereby amended to the extent necessary to give effect to the purpose and intent of this First Amendment.

IN WITNESS WHEREOF, the parties hereto have executed this First Amendment as of the day and year first above written.

LANDLORD:

ARE-QRS CORP.,
a Maryland corporation

By: /s/ Eric S. Johnson
Eric S. Johnson
Vice President
Its: **Real Estate Legal Affairs**

TENANT:

GLYCOMIMETICS, INC.,
a Delaware corporation

By: /s/ Rachel K. King
Its: CEO

EXHIBIT A
DESCRIPTION OF PREMISES

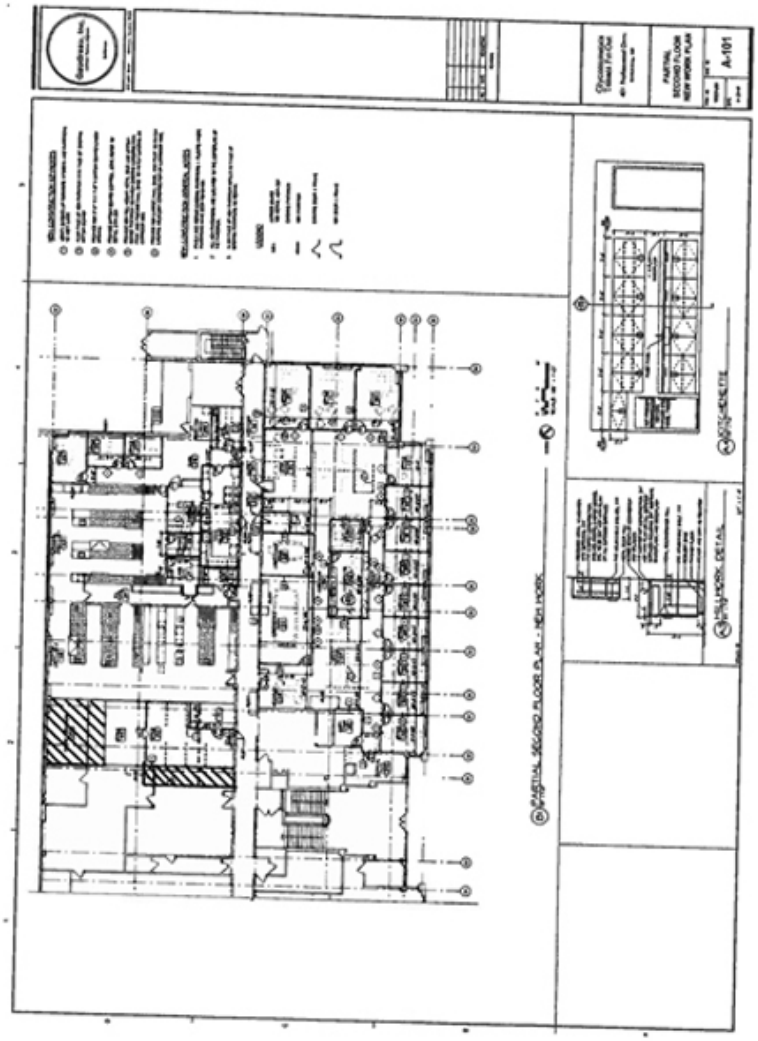
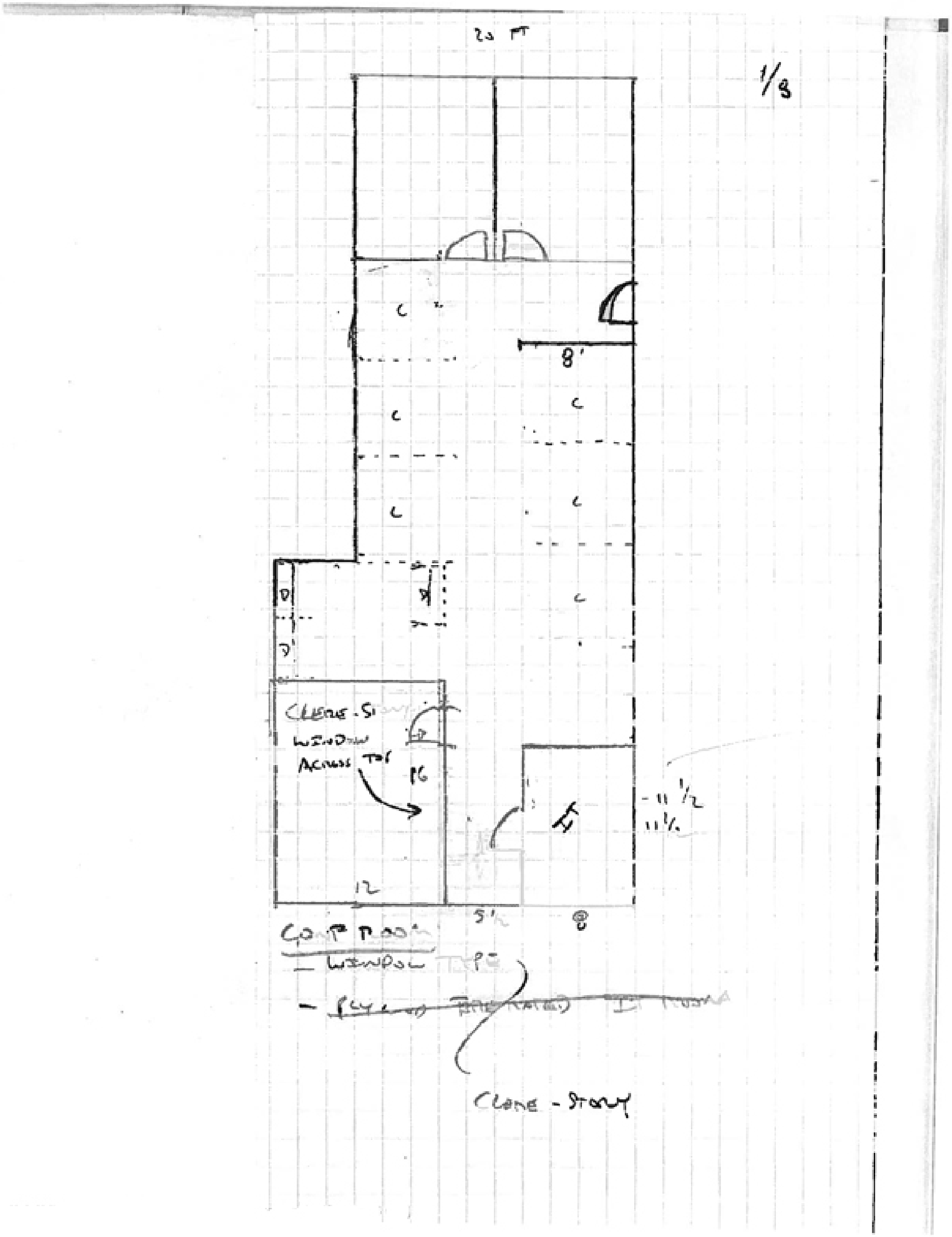


EXHIBIT B

LANDLORD'S WORK TO THE EXPANSION SPACE

5


20 FT
1/8
8'
WINDOW
ACROSS TOP
16
12
8
COMP ROOM
WINDOW TYPE
Clere-Story

SECOND AMENDMENT TO LEASE

THIS SECOND AMENDMENT TO LEASE (this "**Second Amendment**") is made as of December 6, 2011 by and between **ARE-QRS CORP,** a Maryland corporation ("**Landlord**"), and **GLYCOMIMETICS, INC.**, a Delaware corporation ("**Tenant**").

RECITALS

A. Landlord and Tenant are parties to that certain Lease Agreement dated as of July 1, 2010 as amended by that certain First Amendment to Lease dated as of September 21, 2010 (the "Lease"). Pursuant to the Lease, Tenant leases approximately 14,998 rentable square feet in a building located at 401 Professional Drive, Gaithersburg, Maryland (the "**Initial Premises**). Capitalized terms used herein without definition shall have the meanings defined for such terms in the Lease.

B. Landlord and Tenant desire, subject to the terms and conditions set forth herein, to, among other things, expand the Initial Premises to include 2,044 rentable square feet of space located on the second floor of the Building as depicted on Exhibit A hereto (**"Second Expansion Premises**").

NOW, THEREFORE, in consideration of the foregoing Recitals, which are incorporated herein by this reference, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. Second Expansion Premises. Effective as of the Second Expansion Premises Commencement Date (defined in Section 3 below), the Initial Premises shall be expanded to include the Second Expansion Premises and Exhibit A to this Second Amendment is hereby added to Exhibit A to the Lease.

2. Changes to Defined Terms. Effective as of the Second Expansion Premises Commencement Date, the following amendments are hereby made to definitions contained on page 1 of the Lease in the Basic Lease Provisions:

(a) The defined term "**Premises**" shall be deleted in its entirety and replaced with the following:

"**Premises**: That portion of the Project, containing approximately 17,042 rentable square feet, as determined by Landlord, as shown on Exhibit A consisting of (i) approximately 14,998 rentable square feet of space (the "**Initial Premises**") and (ii) approximately 2,044 rentable square feet of space ("**Second Expansion Premises**")."

(b) The defined term "**Rentable Area of the Premises**" shall mean 17,042 rentable square feet; and

(c) The defined term "**Tenant's Share of Operating Expenses**" shall mean 26.98%.

(d) The defined term "**Base Term**" shall be deleted in its entirety and replaced with the following:

"**Base Term**: With respect to the Initial Premises commencing on July 1, 2010 and ending on October 31, 2015. With respect to the Second Expansion Premises, commencing on the Second Expansion Premises Commencement Date and ending on October 31, 2015."

3. Delivery of the Second Expansion Premises. Landlord shall use reasonable efforts to deliver the Second Expansion Premises to Tenant on or before January 1, 2012 ("**Delivery**" or "**Deliver**") with Landlord's Second Expansion Work (defined below) substantially complete. If Landlord fails to timely Deliver the Second Expansion Premises, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this Lease with respect to the Second Expansion Premises shall not be void or voidable. For the purposes of this Section 3, "**Landlord's Second Expansion Work**" shall mean the following work items to be done within the Second Expansion Premises using Building standard materials selected by Landlord: (a) install new carpeting; (b) paint the interior; (c) replace ceiling tiles; (d) replace light lenses; (e) install a door or cased opening connecting the Second Expansion Premises to the Initial Premises; and (f) construct one office in the location shown on Exhibit B hereto. Other than Landlord's Second Expansion Work, Landlord shall have no obligation to perform any work at the Building in connection with Tenant's occupancy of the Second Expansion Premises or obtain any permits, approvals or entitlements related to Tenant's specific use of the Second Expansion Premises or Tenant's business operations therein.

The "**Second Expansion Premises Commencement Date**" shall be the date that Landlord Delivers the Second Expansion Premises to Tenant. Upon request of Landlord, Tenant shall execute and deliver a written acknowledgment of the Second Expansion Premises Commencement Date when the same is established in a form substantially similar to the form of the "Acknowledgement of Commencement Date" attached to the Lease as Exhibit D; provided, however, Tenant's failure to execute and deliver such acknowledgment shall not affect Landlord's rights hereunder.

Except as set forth in this Second Amendment, if applicable: (i) Tenant shall accept the Second Expansion Premises in their condition as of the Second Expansion Premises Commencement Date; (ii) Landlord shall have no obligation for any defects in the Second Expansion Premises; and (iii) Tenant's taking possession of the Second Expansion Premises shall be conclusive evidence that Tenant accepts the Second Expansion Premises and that the Second Expansion Premises were in good condition at the time possession was taken.

Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Second Expansion Premises, and/or the suitability of the Second Expansion Premises for the conduct of Tenant's business, and Tenant waives any implied warranty that the Second Expansion Premises are suitable for the Permitted Use.

The Second Expansion Premises shall be used only for the Permitted Use under the Lease in compliance with the provisions of Section 7 thereof.

4. Base Rent. Tenant shall continue to pay Base Rent with respect to the Initial Premises at the rates set forth in the Lease. Notwithstanding anything to the contrary in the Lease, commencing on the Second Expansion Premises Commencement Date, Base Rent with respect to the Second Expansion Premises shall be payable at the rate of $2,555 per month and shall thereafter be increased in accordance with Section 4 of the Lease.

5. Broker. Landlord and Tenant each represent and warrant that it has not dealt with any broker, agent or other person (collectively "**Broker**") in connection with the transaction reflected in this Second Amendment, and that no Broker brought about this transaction. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this leasing transaction.

6. Miscellaneous.

(a) This Second Amendment is the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous oral and written agreements and discussions. This Second Amendment may be amended only by an agreement in writing, signed by the parties hereto.

(b) This Second Amendment is binding upon and shall inure to the benefit of the parties hereto, their respective agents, employees, representatives, officers, directors, divisions, subsidiaries, affiliates, assigns, heirs, successors in interest and shareholders.

(c) This Second Amendment may be executed in any number of counterparts, each of which shall be deemed an original, but all of which when taken together shall constitute one and the same instrument. The signature page of any counterpart may be detached therefrom without impairing the legal effect of the signature(s) thereon provided such signature page is attached to any other counterpart identical thereto except having additional signature pages executed by other parties to this Second Amendment attached thereto.

(d) Except as amended and/or modified by this Second Amendment, the Lease is hereby ratified and confirmed and all other terms of the Lease shall remain in full force and effect, unaltered and unchanged by this Second Amendment. In the event of any conflict between the provisions of this Second Amendment and the provisions of the Lease, the provisions of this Second Amendment shall prevail. Whether or not specifically amended by this Second Amendment, all of the terms and provisions of the Lease are hereby amended to the extent necessary to give effect to the purpose and intent of this Second Amendment.

[Signature Page Immediately Follows]

IN WITNESS WHEREOF, the parties hereto have executed this Second Amendment as of the day and year first above written.

LANDLORD:

ARE-QRS CORP.,
a Maryland corporation

By: /s/ Jennifer Pappas
JENNIFER PAPPAS
Its: **SVP – GENERAL COUNSEL**

TENANT:

GLYCOMIMETICS, INC.,
a Delaware corporation

By: /s/ Rachel K. King
Its: CEO

EXHIBIT A
DESCRIPTION OF SECOND EXPANSION PREMISES

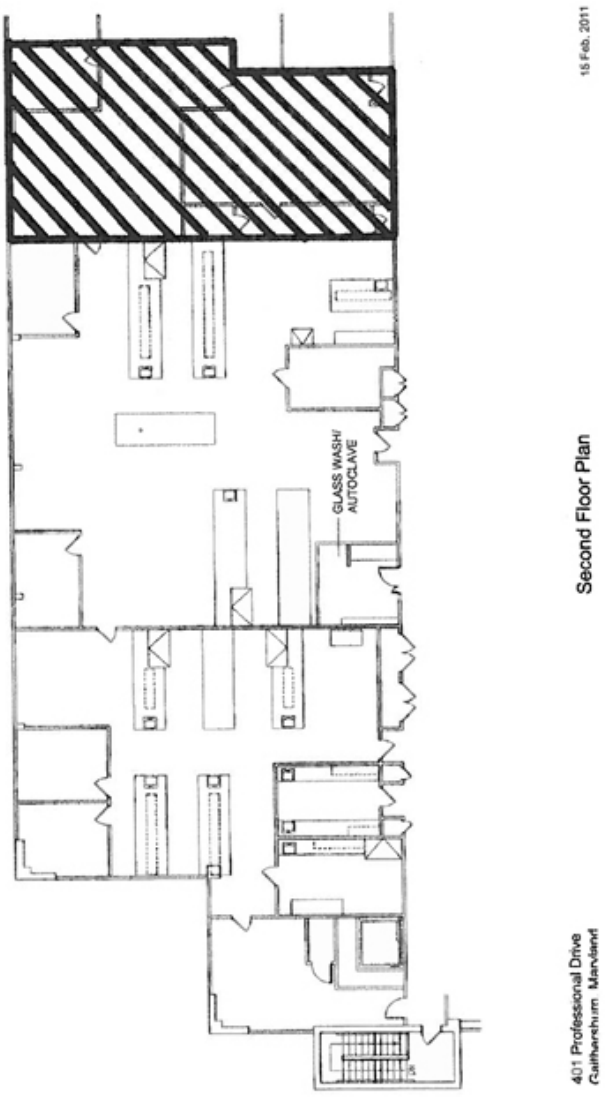


EXHIBIT B

OFFICE DEPICTION

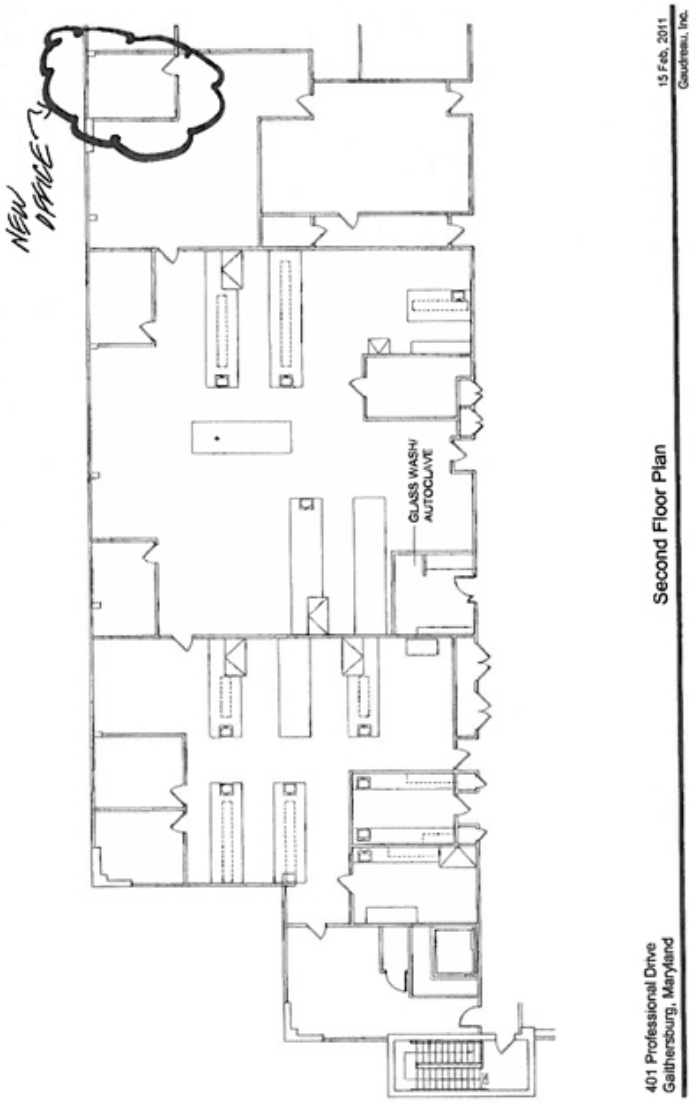


Exhibit 10.4

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND APPLICABLE STATE SECURITIES LAW OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS EXEMPT FROM REGISTRATION.

WARRANT TO PURCHASE STOCK

Company: GLYCOMIMETICS, INC., a Delaware corporation
Number of Shares: 51,000*
Class of Stock: Series B Preferred*
Warrant Price: $0.7845 per share*
Issue Date: October 12, 2006
Expiration Date: October 12, 2016

THIS WARRANT CERTIFIES THAT, for the agreed upon value of $1.00 and for other good and valuable consideration, SILICON VALLEY BANK (Silicon Valley Bank, together with any registered holder from time to time of this Warrant or any holder of the shares issuable or issued upon exercise of this Warrant, "Holder") is entitled to purchase the number of fully paid and nonassessable shares of the class of securities (the "Shares") of the Company at the Warrant Price, all as set forth above and as adjusted pursuant to Article 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant.

ARTICLE 1: EXERCISE.

1.1 Method of Exercise. Holder may exercise this Warrant by delivering a duly executed Notice of Exercise in substantially the form attached as Appendix 1 to the principal office of the Company. Unless Holder is exercising the conversion right set forth in Article 1.2, Holder shall also deliver to the Company a check, wire transfer (to an account designated by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Conversion Right. In lieu of exercising this Warrant as specified in Article 1.1, Holder may from time to time convert this Warrant, in whole or in part, into a number of Shares determined by dividing (a) the aggregate fair market value of the Shares or other securities otherwise issuable upon exercise of this Warrant minus the aggregate Warrant Price of such Shares by (b) the fair market value of one Share. The fair market value of the Shares shall be determined pursuant to Article 1.3.

1.3 Fair Market Value. If the Company's common stock is traded in a public market and the Shares are common stock, the fair market value of each Share shall be the closing price of a Share reported for the business day immediately before Holder delivers its Notice of Exercise to the Company (or in the instance where the Warrant is exercised immediately prior to

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* This Warrant is now exercisable for 51,000 shares of Common Stock at an exercise price of $7.845 per share.

the effectiveness of the Company's initial public offering, the "price to public" per share price specified in the final prospectus relating to such offering). If the Company's common stock is traded in a public market and the Shares are preferred stock, the fair market value of a Share shall be the closing price of a share of the Company's common stock reported for the business day immediately before Holder delivers its Notice of Exercise to the Company (or, in the instance where the Warrant is exercised immediately prior to the effectiveness of the Company's initial public offering, the initial "price to public" per share price specified in the final prospectus relating to such offering), in both cases, multiplied by the number of shares of the Company's common stock into which a Share is convertible. If the Company's common stock is not traded in a public market, the Board of Directors of the Company shall determine fair market value in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Promptly after Holder exercises or converts this Warrant and, if applicable, the Company receives payment of the aggregate Warrant Price, the Company shall deliver to Holder certificates for the Shares acquired and, if this Warrant has not been fully exercised or converted and has not expired, a new Warrant representing the Shares not so acquired.

1.5 Replacement of Warrants. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor.

1.6 Treatment of Warrant Upon Acquisition of Company.

1.6.1 "Acquisition". For the purpose of this Warrant, "Acquisition" means any sale, license, or other disposition of all or substantially all of the assets of the Company, or any reorganization, consolidation, or merger of the Company where the holders of the Company's securities before the transaction beneficially own less than 50% of the outstanding voting securities of the surviving entity after the transaction.

1.6.2 Treatment of Warrant at Acquisition.

(a) Upon the written request of the Company, Holder shall, in the event of an Acquisition in which the sole consideration is cash, either (a) exercise its conversion or purchase right under this Warrant and such exercise will be deemed effective immediately prior to the consummation of such Acquisition or (b) permit the Warrant to expire upon the consummation of such Acquisition. The Company shall provide the Holder with written notice of its request relating to the foregoing (together with such reasonable information as the Holder may request in connection with such contemplated Acquisition giving rise to such notice), which is to be delivered to Holder not less than ten (10) days prior to the closing of the proposed Acquisition.

(b) Upon the written request of the Company, Holder shall, in the event of an Acquisition that is an "arms length" sale of all or substantially all of the Company's assets (and only its assets) to a third party that is not an Affiliate (as defined below) of the Company (a

"True Asset Sale"), either (a) exercise its conversion or purchase right under this Warrant and such exercise will be deemed effective immediately prior to the consummation of such Acquisition or (b) permit the Warrant to continue until the Expiration Date if the Company continues as a going concern following the closing of any such True Asset Sale. The Company shall provide the Holder with written notice of its request relating to the foregoing (together with such reasonable information as the Holder may request in connection with such contemplated Acquisition giving rise to such notice), which is to be delivered to Holder not less than ten (10) days prior to the closing of the proposed Acquisition.

(c) Upon the closing of any Acquisition other than those particularly described in subsections and (b) above, the successor entity shall assume the obligations of this Warrant, and this Warrant shall be exercisable for the same securities, cash, and property as would be payable for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on the record date for the Acquisition and subsequent closing. The Warrant Price and/or number of Shares shall be adjusted accordingly.

As used herein "Affiliate" shall mean any person or entity that owns or controls directly or indirectly ten (10) percent or more of the stock of Company, any person or entity that controls or is controlled by or is under common control with such persons or entities, and each of such person's or entity's officers, directors, joint venturers or partners, as applicable.

ARTICLE 2: ADJUSTMENTS TO THE SHARES.

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend on the Shares payable in common stock, or other securities, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned the Shares of record as of the date the dividend occurred. If the Company subdivides the Shares by reclassification or otherwise into a greater number of shares or takes any other action which increase the amount of stock into which the Shares are convertible, the number of shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding shares are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of Shares shall be proportionately decreased.

2.2 Reclassification, Exchange, Combinations or Substitution. Upon any reclassification, exchange, substitution, or other event that results in a change of the number and/or class of the securities issuable upon exercise or conversion of this Warrant, Holder shall be entitled to receive, upon exercise or conversion of this Warrant, the number and kind of securities and property that Holder would have received for the Shares if this Warrant had been exercised immediately before such reclassification, exchange, substitution, or other event. Such an event shall include any automatic conversion of the outstanding or issuable securities of the Company of the same class or series as the Shares to common stock pursuant to the terms of the Company's Amended and Restated Certificate of Incorporation upon the closing of a registered public offering of the Company's common stock. The Company or its successor shall promptly issue to Holder an amendment to this Warrant setting forth the number and kind of such new securities or other property issuable upon exercise or conversion of this Warrant as a result of

such reclassification, exchange, substitution or other event that results in a change of the number and/or class of securities issuable upon exercise or conversion of this Warrant. To the maximum extent practicable, the amendment to this Warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Warrant Price and to the number of securities or property issuable upon exercise of the new Warrant. The provisions of this Article 2.2 shall similarly apply to successive reclassifications, exchanges, substitutions, or other events.

2.3 Adjustments for Diluting Issuances. The Warrant Price and the number of Shares issuable upon exercise of this Warrant or, if the Shares are Preferred Stock, the number of shares of common stock issuable upon conversion of the Shares, shall be subject to adjustment, from time to time in the manner set forth in the Company's Amended and Restated Certificate of Incorporation as if the Shares were issued and outstanding on and as of the date of any such required adjustment. The provisions set forth for the Shares in the Company's Certificate of Incorporation relating to the above in effect as of the Issue Date may not be amended, modified or waived, without the prior written consent of Holder unless such amendment, modification or waiver affects the rights associated with the Shares in the same manner as such amendment, modification or waiver affects the rights associated with all other shares of the same series and class as the Shares granted to the Holder.

2.4 No Impairment. The Company shall not, by amendment of its Certificate of Incorporation or through a reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this Warrant by the Company, but shall at all times in good faith assist in carrying out of all the provisions of this Article 2 and in taking all such action as may be necessary or appropriate to protect Holder's rights under this Article against impairment.

2.5 Fractional Shares. No fractional Shares shall be issuable upon exercise or conversion of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise or conversion of the Warrant, the Company shall eliminate such fractional share interest by paying Holder the amount computed by multiplying the fractional interest by the fair market value of a full Share.

2.6 Certificate as to Adjustments. Upon each adjustment of the Warrant Price, the Company shall promptly notify Holder in writing, and, at the Company's expense, promptly compute such adjustment, and furnish Holder with a certificate of its Chief Financial Officer setting forth such adjustment and the facts upon which such adjustment is based. The Company shall, upon written request, furnish Holder a certificate setting forth the Warrant Price in effect upon the date thereof and the series of adjustments leading to such Warrant Price.

ARTICLE 3: REPRESENTATIONS AND COVENANTS OF THE COMPANY.

3.1 Representations and Warranties. The Company represents and warrants to the Holder as follows:

(a) The initial Warrant Price referenced on the first page of this Warrant is not greater than the price per share at which the Shares were last issued in an arms-length transaction in which at least $500,000 of the Shares were sold.

(b) All Shares which may be issued upon the exercise of the purchase right represented by this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, in accordance with the provisions of this Warrant and the Amended and Restated Certificate of Incorporation of the Company, be duly authorized, validly issued, fully paid and nonassessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws and as otherwise contemplated by the **Amended and Restated** Stockholders Agreement dated as of June 19, 2006 by and among the Company and the stockholders identified therein (the "Stockholders Agreement").

(c) The Capitalization Table attached hereto as **Schedule 1** is true and complete as of the Issue Date.

3.2 Notice of Certain Events. If the Company proposes at any time (a) to declare any dividend or distribution upon any of its stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) to offer for sale additional shares of any class or series of the Company's stock; (c) to effect any reclassification or recapitalization of any of its stock; (d) to merge or consolidate with or into any other corporation, or sell, lease, license, or convey all or substantially all of its assets, or to liquidate, dissolve or wind up; or (e) offer holders of registration rights the opportunity to participate in an underwritten public offering of the company's securities for cash, then, in connection with each such event, the Company shall give Holder: (1) at least 10 days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of common stock will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (c) and (d) above; (2) in the case of the matters referred to in (c) and (d) above at least 10 days prior written notice of the date when the same will take place (and specifying the date on which the holders of common stock will be entitled to exchange their common stock for securities or other property deliverable upon the occurrence of such event); and (3) in the case of the matter referred to in (e) above, the same notice as is given to the holders of such registration rights. Company will also provide information requested by Holder reasonably necessary to enable Holder to comply with Holder's accounting or reporting requirements.

3.3 Registration Under Securities Act of 1933, as amended. The Company agrees that the Shares or, if the Shares are convertible into common stock of the Company, such common stock, shall have the incidental ("Piggyback") registration rights and the S-3 registration rights set forth in Sections 5 and 6 of the Company's Amended and Restated Investor Rights Agreement dated June 19, 2006 (the "Investor Rights Agreement"), together with any obligations and restrictions set forth in Sections 2, 3, 4, and 9 of the Investors Rights Agreement. The provisions set forth in the Investor Rights Agreement relating to the above may not be amended, modified or waived without the prior written consent of Holder unless such amendment, modification or waiver affects the rights associated with the Shares in the same manner as such amendment, modification, or waiver affects the rights associated with all other

shares of the same series and class as the Shares granted to the Holder. Holder shall not be a party to the Investor Rights Agreement but shall only be entitled to the Piggyback and S-3 registration rights set forth therein.

3.4 No Shareholder Rights. Except as provided in this Warrant, the Holder will not have any rights as a shareholder of the Company until the exercise of this Warrant.

ARTICLE 4: REPRESENTATIONS, WARRANTIES OF THE HOLDER. THE HOLDER REPRESENTS AND WARRANTS TO THE COMPANY AS FOLLOWS:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by the Holder will be acquired for investment for the Holder's account, not as a nominee or agent, and not with a view to the public resale or distribution within the meaning of the Act. Holder also represents that the Holder has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. The Holder has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. The Holder further has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent the Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to the Holder or to which the Holder has access.

4.3 Investment Experience. The Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. The Holder has experience as an investor in securities of companies in the development stage and acknowledges that the Holder can bear the economic risk of such Holder's investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that the Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or has a preexisting personal or business relationship with the Company and certain of its officers, directors or controlling persons of a nature and duration that enables the Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. The Holder is an "accredited investor" within the meaning of Regulation D promulgated under the Act.

4.5 The Act. The Holder understands that this Warrant and the Shares issuable upon exercise or conversion hereof have not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of the Holder's investment intent as expressed herein. The Holder understands that this Warrant and the Shares issued upon any exercise or conversion hereof must be held indefinitely unless subsequently registered under the Act and qualified under applicable state securities laws, or unless exemption from such registration and qualification are otherwise available.

ARTICLE 5: MISCELLANEOUS.

5.1 Term: This Warrant is exercisable in whole or in part at any time and from time to time on or before the Expiration Date.

5.2 Legends. This Warrant and the Shares (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) shall be imprinted with a legend in substantially the following form:

> THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE ACT, OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND APPLICABLE STATE SECURITIES LAW OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS EXEMPT FROM REGISTRATION.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part without the Company's prior written consent (except if to an affiliate of Holder or pursuant to the SVB Transfer (as defined below)) and compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company). The Company shall not require Holder to provide an opinion of counsel if the transfer is to Bank's parent company, SVB Financial Group (formerly Silicon Valley Bancshares) or any other affiliate of Holder. Additionally, the Company shall also not require an opinion of counsel if there is no material question, in the reasonable determination of the Company, as to the availability of current information as referenced in Rule 144(c) of the Act, Holder represents that it has complied with Rule 144(d) and (e) of the Act in reasonable detail, the selling broker represents that it has complied with Rule 144(f) of the Act, and the Company is provided with a copy of Holder's notice of proposed sale.

5.4 Transfer Procedure. Upon receipt by Holder of the executed Warrant, Holder will transfer all of this Warrant to SVB Financial Group (the "SVB Transfer") by execution of an Assignment substantially in the form of Appendix 2. Subject to the provisions of Article 5.3 and upon providing Company with written notice, SVB Financial Group and any subsequent Holder may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the Shares issuable directly or indirectly, upon conversion of the Shares, if any) to any transferee, provided, however, in connection with any such transfer, SVB Financial Group or any subsequent Holder will give the Company notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and Holder will surrender this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable). The Company may refuse to transfer this Warrant or the Shares to any person who directly competes with the Company, unless, in either case, the stock of the Company is publicly traded.

5.5 Notices. All notices and other communications from the Company to the Holder, or vice versa, shall be deemed delivered and effective when given personally or mailed by first-class registered or certified mail, postage prepaid, at such address as may have been furnished to the Company or the Holder, as the case may (or on the first business day after transmission by facsimile) be, in writing by the Company or such holder from time to time. Effective upon receipt of the fully executed Warrant and the initial transfer described in Article 5.4 above, all notices to the Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

SVB Financial Group
Attn: Treasury Department
3003 Tasman Drive, HA 200
Santa Clara, CA 95054
Telephone: 408-654-7400
Facsimile: 408-496-2405

Notice to the Company shall be addressed as follows until the Holder receives notice of a change in address:

GLYCOMIMETICS, INC.
Attn: Rachel K. King
101 Orchard Ridge Drive, Suite 1E, Gaithersburg, MD 20878
Telephone: (240) 243-1212

5.6 Stockholders Agreement. The Holder agrees to execute a joinder to the Stockholders Agreement upon any exercise of this Warrant (if such Stockholders Agreement is still in effect at that time).

5.7 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.8 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.9 Automatic Conversion upon Expiration. In the event that, upon the Expiration Date, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above is greater than the Exercise Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be converted pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised or converted, and the Company shall promptly deliver a certificate representing the Shares (or such other securities) issued upon such conversion to the Holder.

5.10 Counterparts. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement.

5.11 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

"COMPANY"	"HOLDER"
GLYCOMIMETICS, INC.	SILICON VALLEY BANK
By: /s/ Rachel K. King	By: /s/ Heather Parker
Name: Rachel K. King	Name: Heather Parker
Title: Chief Executive Officer	Title: Relationship Manager

Exhibit 10.5

THIS WARRANT HAS BEEN TAKEN FOR INVESTMENT, HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED OR THE SECURITIES LAWS OF ANY STATE, AND MAY NOT BE SOLD, TRANSFERRED, ASSIGNED, PLEDGED, HYPOTHECATED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION OR AN EXEMPTION THEREFROM UNDER SUCH LAWS.

GLYCOMIMETICS, INC.

Common Stock Purchase Warrant

Warrant Issue Date: _____ Warrant No. _____

GlycoMimetics, Inc., a Delaware corporation (the ***"Company"***), hereby certifies that, for value received, _____ or its assigns or transferees (the ***"Holder"***), is entitled, subject to the terms set forth below, to purchase from the Company at any time during the period commencing on the Exercise Start Date (as hereinafter defined) and ending at 5:00 P.M., New York time, on the tenth (10th) anniversary of the date hereof (the ***"Expiration Date"***), up to the number of shares of Common Stock as determined pursuant to Section 1(a) below (the ***"Warrant Shares"***), at the Exercise Price (as hereinafter defined). The number and character of the Warrant Shares and the Exercise Price are subject to adjustment as provided herein.

The term "Warrant" as used herein shall include this Warrant and any warrants delivered in substitution or exchange therefor as provided herein. This Warrant is one in the Company's Common Stock purchase warrants (collectively, the ***"Bridge Warrants"***) issued concurrently with the issuance of those certain convertible unsecured promissory notes in the aggregate principal amount of $2 million (the ***"Bridge Notes"***) including such convertible unsecured promissory note (the ***"Note"***) issued to the Holder. Each of the Warrants is substantially similar. Capitalized terms used but not otherwise defined herein have the meanings ascribed to them in the Note.

The following terms, unless the context otherwise requires, have the following respective meanings for purposes of this Warrant:

(a) ***"Common Stock"*** includes (i) the Company's Common Stock, $0.001 par value per share, and (ii) any other securities into which or for which any of the securities described in (i) may be converted or exchanged pursuant to a plan of recapitalization, reorganization, merger, sale of assets or other similar corporate rearrangement.

(b) ***"Exercise Period"*** means the period commencing on the Exercise Start Date and ending on the Expiration Date.

(c) ***"Exercise Price"*** means $0.01 per Warrant Share.

(d) ***"Exercise Start Date"*** means the date hereof.

(e) ***"Qualified Equity Financing"*** means the date on which the Company consummates an equity financing pursuant to which it sells shares of its preferred stock with an aggregate sales price of not less than $10,000,000 including any and all convertible promissory notes which are converted into such preferred stock (including the Bridge Notes), and with the principal purpose of raising capital.

1. Exercise of Warrant.

(a) Calculation of Warrant Shares. The number of Warrant Shares the Holder is permitted to purchase is determined by reference to the following formula:

[[WS x (HN/BN)] x [(D/30) x 0.20]]/SP where:

WS = 500,000
HN = The stated principal amount of the Note on the date of its issuance
BN = $2,000,000
D = The lesser of (i) (x) the actual number of calendar days elapsed between the date hereof and (y) the date of the first closing of a Qualified Equity Financing or (ii) 150.
SP = The price per share of Financing Stock sold in the Qualified Equity Financing.

An example of the calculation is set forth on Annex A hereto.

(b) Full Exercise. This Warrant may be exercised by the Holder by surrender of this Warrant, with the form of subscription attached hereto (the **"Subscription Notice"**) duly executed by the Holder to the Company at its principal office, accompanied by payment, in cash or by certified or official bank check payable to the order of the Company, in the amount obtained by multiplying the number of Warrant Shares by the applicable Exercise Price.

(c) Partial Exercise. This Warrant may be exercised in part by surrender of the Warrant in the manner and at the place provided in Section 1(b) except that the amount payable by the Holder on such partial exercise shall be the amount obtained by multiplying (i) the number of Warrant Shares designated by the Holder in the Subscription Notice by (ii) the applicable Exercise Price. On any such partial exercise the Company at its expense will forthwith issue and deliver to or upon the order of the Holder a new warrant or warrants of like tenor, in the name of the Holder or as the Holder (upon payment by the Holder of any applicable transfer taxes) may request, calling in the aggregate on the face or faces thereof for the number of shares of Common Stock for which such warrant or warrants may still be exercised.

(d) Exercise by Exchange of Warrant. In addition to and without limiting the rights of the Holder under the terms hereof, this Warrant may be exercised by being exchanged in whole or in part at any time during the Exercise Period for the number of shares of Common Stock having an aggregate fair market value as reasonably determined by the Company's board

of directors) on the date of such exercise equal to the difference between (i) the fair market value on the date of the exercise of a number of Warrant Shares (the **"Exchange Shares"**) designated by the Holder on the date of exercise to be exchanged for such shares Common Stock and (ii) the aggregate Exercise Price otherwise payable by the Holder for such Exchange Shares. Upon any such exercise, the number of Warrant Shares purchasable upon exercise of this Warrant shall be reduced by the sum of (x) the number of such Exchange Shares and (y) the number of Warrant Shares acquired hereunder using said Exchange Shares, if a balance of purchasable Warrant Shares remains after such exercise, the Company shall execute and deliver to the Holder a new Warrant for such balance of Warrant Shares. No payment of any cash or other consideration shall be required or permitted. Such exchange shall be effective upon the date of receipt by the Company of the original Warrant surrendered for cancellation and a written request from the Holder that the exchange pursuant to this Section 1(d) be made, or at such later date as may be specified in such request. No fractional shares arising out of the above formula for determining the number of shares issuable in such exchange shall be issued, and the Company shall in lieu thereof make payment to the Holder of cash in the amount of such fraction multiplied by the then current market value of such securities on the date of the exchange.

(e) Company Acknowledgment. The Company will, at the time of the exercise of this Warrant and upon the request of the Holder, acknowledge in writing its continuing obligation to afford to the Holder any rights to which the Holder shall continue to be entitled after such exercise in accordance with the provisions of this Warrant. If the Holder shall fail to make any such request, such failure shall not affect the continuing obligation of the Company to afford to the Holder any such rights.

2. Delivery of Stock Certificates, on Exercise. As soon as practicable after the exercise of this Warrant in full or in part, and in any event within five (5) days thereafter, the Company, at its expense (including the payment by it of any applicable issue taxes), will cause to be issued in the name of and delivered to the Holder, or as the Holder (upon payment by the Holder of any applicable transfer taxes) may direct, a certificate or certificates for the number of fully paid and non-assessable Warrant Shares to which the Holder shall be entitled on such exercise, plus, in lieu of any fractional share to which the Holder would otherwise be entitled, cash equal to such fraction multiplied by the then current market value of one (1) full share, together with any other stock or other securities and property (including cash, where applicable) to which the Holder is entitled upon such exercise pursuant to Section 1 or otherwise.

3. Adjustment for Dividends in Other Stock, Property, Reclassification. In case at any time or from time to time, the holders of Warrant Shares shall have received, or (on or after the record date fixed for the determination of shareholders eligible to receive) shall have become entitled to receive, without payment therefor,

(a) other or additional stock or other securities or property (other than cash) by way of dividend, or

(b) any cash (excluding cash dividends payable solely out of earnings or earned surplus of the Company), or

(c) other or additional stock or other securities or property (including cash) by way of spin-off, split-up, reclassification, recapitalization, combination of shares or similar corporate rearrangement,

other than additional shares of Warrant Shares issued as a stock dividend or in a stock-split (adjustments in respect of which are provided for in Section 5), then and in each such case the Holder, on the exercise hereof as provided in Section 1, shall be entitled to receive the amount of stock and other securities and property (including cash in the cases referred to in subdivisions (b) and (c) of this Section 3) that Holder would hold on the date of such exercise if on the date hereof the Holder had been the holder of record of the number of Warrant Shares into which this Warrant was exercisable into as of such date and had thereafter, during the period from the date hereof to and including the date of such exercise, retained such shares and all such other or additional stock and other securities and property (including cash in the cases referred to in Sections 3(b) and 3(c)) receivable by the Holder as aforesaid during such period, giving effect to all adjustments called for during such period by Sections 4 and 5.

4. Adjustment for Reorganization, Consolidation, Merger.

(a) General. In case at any time or from time to time, the Company shall (i) effect a reorganization, (ii) consolidate with or merge into any other person, or (iii) transfer all or substantially all of its properties or assets to any other person under any plan or arrangement contemplating the dissolution of the Company, then, in each such case, except as otherwise provided in Section 4(c), the holder of this Warrant, on the exercise hereof, as provided in Section 1, at any time after the consummation of such reorganization, consolidation or merger or the effective date of such dissolution, as the case may be, shall receive, in lieu of the Warrant Shares issuable on such exercise prior to such consummation or such effective date, the stock and other securities and property (including cash) to which such holder would have been entitled upon such consummation or in connection with such dissolution, as the case may be, if such holder had so exercised this Warrant immediately prior thereto, all subject to further adjustment thereafter as provided in Sections 3 and 5.

(b) Dissolution. Except as otherwise provided in Section 4(c) hereof, in the event of any dissolution of the Company following the transfer of all or substantially all of its properties or assets, the Company, prior to such dissolution, shall at its expense deliver or cause to be delivered the stock and other securities and property (including cash, where applicable) receivable by the holders of this Warrant after the effective date of such dissolution pursuant to this Section 4 to a bank or trust company, as trustee for the holder or holders of this Warrant.

(c) Continuation of Terms. Except as otherwise provided herein, upon any reorganization, consolidation, merger or transfer (and any dissolution following any transfer) referred to in this Section 4, this Warrant shall continue in full force and effect and the terms hereof shall be applicable to the shares of stock and other securities and property receivable on the exercise of this Warrant after the consummation of such reorganization, consolidation or merger or the effective date of dissolution following any such transfer, as the case may be, and shall be binding upon the issuer of any such stock or other securities, including, in the case of any such transfer, the person acquiring all or substantially all of the properties or assets of the Company, whether or not such person shall have expressly assumed the terms of this Warrant.

5. Adjustment for Extraordinary Events. In the event that the Company shall (a) issue additional shares of Common Stock as a dividend or other distribution on outstanding Common Stock, (b) subdivide its outstanding shares of Common Stock, or (c) combine its outstanding shares of Common Stock into a smaller number of shares of Common Stock (any such event, an ***"Extraordinary Event"***), then, in each such Extraordinary Event, the Exercise Price shall, simultaneously with the happening of such Extraordinary Event, be adjusted by multiplying the then Exercise Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such Extraordinary Event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after such Extraordinary Event, and the product so obtained shall thereafter be the Exercise Price then in effect, provided, however, that in no event shall the Exercise Process be less than the then applicable par value of a share of Common Stock.

The Exercise Price, as so adjusted, shall be readjusted in the same manner upon the happening of any successive Extraordinary Event or Extraordinary Events. The holder of this Warrant shall thereafter, on the exercise hereof as provided in Section 1, be entitled to receive that number of Warrant Shares determined by multiplying the number of shares of Common Stock, as applicable, which would otherwise (but for the provisions of this Section 5) be issuable on such exercise by a fraction, the numerator of which is the Exercise Price that would otherwise (but for the provisions of this Section 5) be in effect, and the denominator of which is the Exercise Price in effect on the date of such exercise. Notwithstanding the foregoing, in no event shall the Exercise Process be less than the then applicable par value of a share of Common Stock

6. Certificate as to Adjustments. In each case of any adjustment or readjustment in the Warrant Shares issuable on the exercise of this Warrant, the Company at its expense will promptly cause its Treasurer or Chief Financial Officer to compute such adjustment or readjustment in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company will, as soon as practical, mail a copy of each such certificate to any holder of this Warrant, and will, on the written request at any time of any holder of this Warrant, furnish to the Holder a like certificate setting forth the number of Warrant Shares that the Holder may purchase pursuant to this Warrant, the Exercise Price then in effect, and the manner in which the foregoing was calculated.

7. Notices of Record Date, Etc. In the event of:

(a) any taking by the Company of a record of the holders of any class or securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right, or

(b) any capital reorganization of the Company, any reclassification or recapitalization of the capital stock of the Company or any transfer of all or substantially all the assets of the Company to or consolidation or merger of the Company with or into any other person, or any voluntary or involuntary dissolution, liquidation or winding-up of the Company,

then and in each such event the Company will mail or cause to be mailed to any holder of this Warrant a notice specifying (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, (ii) the date on which any such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding-up is to take place, and the time, if any is to be fixed, as of which the Holders of record of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable on such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding-up, and (iii) the amount and character of any stock or other securities, or rights or options with respect thereto, proposed to be issued or granted, the date of such proposed issue or grant and the persons or class of persons to whom such proposed issue or grant is to be offered or made. Such notice shall be mailed at least 20 days prior to the date specified in such notice on which any such action is to be taken.

8. Securities Law Matters.

(a) Neither this Warrant nor the securities issuable upon exercise of this Warrant have been registered under the Securities Act of 1933 (the **"Securities Act"**) or any state securities laws (together with the Securities Act, the **"Acts"**). Therefore, in order, among other things, to ensure compliance with the Acts notwithstanding anything else in the Warrant to contrary, the Holder of this Warrant, including any successive Holder, agrees by accepting this Warrant as follows: This Warrant and the securities which may be issued upon the exercise hereof, may not be exercised, sold, transferred, pledged or hypothecated in the absence of (i) an effective registration statement or post-effective amendment thereto for such Warrants or the securities into which this Warrant is exercisable, respectively, under the Acts, or (ii) the Holder's delivery to the Borrower of an opinion of counsel, reasonably satisfactory to the Borrower that an exemption from the registration requirements of the Acts is available. The Holder of this Warrant, including any successive Warrant, further represents and warrants by accepting this Warrant that such Holder is an "Accredited Investor" as such term is defined in the Securities Act (and the regulations promulgated thereunder) and this Warrant and any securities issuable upon exercise of this Warrant are being acquired for investment, and not with a view to distribution or resale, within the meaning of the Securities Act. Upon exercise of this Warrant, the persons entitled to receive the shares of securities into which this Warrant is exercisable may be required to execute and deliver to the Company such other documents and instruments, in form reasonably satisfactory to the Company to effect the compliance of the issuance of this Warrant and the securities issuable on exercise of this Warrant with the Acts.

(b) Legend on Shares. Each certificate for securities initially issued upon exercise of this Warrant, unless at the time of exercise such shares are registered under the Acts, shall bear substantially the following legend (and any additional legend required under said Acts or otherwise):

> **"The securities represented by this Certificate have not been registered under the Securities Act of 1933 or any state securities acts (the "Acts") and cannot be transferred except (i) pursuant to a registration statement effective under the Acts, or (ii) pursuant to an exemption from the registration requirements of the Acts."**

Any certificate issued at any time in exchange or substitution for any certificate bearing such legend (except a new certificate issued upon completion of a public distribution pursuant to a registration statement under the Acts of the securities represented thereby) shall also bear such legend unless, in the reasonable opinion of counsel for the Company, the securities represented thereby need no longer be subject to the transfer restrictions contained in this Warrant. The conversion and transfer restriction provisions of this Warrant shall be binding upon all successive Holders of this Warrant.

9. Amendment. The terms of this Warrant may be amended, modified or waived only with the written consent of the Company and the holders holding Bridge Warrants representing 75% of the aggregate Warrant Shares into which the Bridge Warrants are then exercisable.

10. Reservation of Stock. The Company will at all times reserve and keep available, solely for issuance and delivery on the exercise of this Warrant, all Warrant Shares from time to time issuable on the exercise hereof.

11. Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction of this Warrant, on delivery of an indemnity agreement mutually agreeable to the Company and the Holder or, in the case of any such mutilation, on surrender and cancellation of such Warrant, the Company at its expense will execute and deliver, in lieu thereof, a new substantially identical warrant.

12. Warrant Agent. The Company may, by written notice to the Holder, appoint an agent for the purpose of issuing Warrant Shares on the exercise of this Warrant pursuant to Section 1 and replacing this Warrant pursuant to Section 11, or any of the foregoing, and thereafter any such issuance, exchange or replacement, as the case may be, shall be made at such office by such agent.

13. Remedies. The Company stipulates that the remedies at law of the Holder, in the event of any default or threatened default by the Company in the performance of or compliance with any of the terms of this Warrant, are not and will not be adequate, and that such terms may be specifically enforced by a decree for the specific performance of any agreement contained herein or by an injunction against a violation of any of the terms hereof or otherwise.

14. Negotiability, Etc. This Warrant is issued upon the following terms, to all of which any holder or owner hereof by the taking hereof consents and agrees:

(a) title to this Warrant may be transferred by endorsement (by the Holder executing the form of assignment at the end hereof) and delivery in the same manner as in the case of a negotiable instrument transferable by endorsement and delivery;

(b) any person in possession of this Warrant properly endorsed is authorized to represent himself as absolute owner hereof and is empowered to transfer absolute title hereto by endorsement and delivery hereof to a bona fide purchaser hereof for value; each prior taker or owner waives and renounces all of his equities or rights in this Warrant in favor of each such bona fide purchaser, and each such bona fide purchaser shall acquire absolute title hereto and to all rights represented hereby; and

(c) until this Warrant is transferred on the books of the Company, the Company may treat the registered Holder as the absolute owner hereof for all purposes, notwithstanding any notice to the contrary.

15. Notices, Etc. All notices and other communications from the Company to the Holder of this Warrant shall be mailed by first class registered or certified mail, postage prepaid, at such address as may have been furnished to the Company in writing by the Holder or, until any the Holder furnishes to the Company an address, then to, and at the address of, the last holder of this Warrant who has so furnished an address to the Company.

16. Governing Law. This Warrant shall be governed by, and construed in accordance with, the laws of the State of Delaware.

17. Miscellaneous. This Warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought. The headings in this Warrant are for purposes of reference only, and shall not limit or otherwise affect any of the terms hereof. This Warrant is being executed as an instrument under seal. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

[Signature Page to Follow]

IN WITNESS WHEREOF, the Company has caused this Common Stock Purchase Warrant No. _____ to be executed and delivered on its behalf by one of its duly authorized officers as of the date first written above.

GLYCOMIMETICS, INC.

By: _____

Rachel King
President and CEO

FORM OF SUBSCRIPTION

(To be signed only on exercise of Warrant)

TO: GlycoMimetics, Inc.

The undersigned, the Holder of the within Warrant, hereby irrevocably elects to exercise this Warrant for, and to purchase thereunder, shares of Common Stock of GlycoMimetics, Inc. and herewith makes payment of $ therefor, and requests that the certificates for such shares be issued in the name of, and delivered to , whose address is .

Dated: _____

_____

Name of Holder: _____

Title: _____

FORM OF ASSIGNMENT
(To be signed only on transfer of Warrant)

For value received, the undersigned hereby sells, assigns, and transfers unto the right represented by the Common Stock Purchase Warrant No. to purchase that number of shares of Common Stock of GlycoMimetics, Inc. to which the such Warrant relates, and appoints attorney-in-fact to transfer such right on the books of GlycoMimetics, Inc. with full power of substitution in the premises.

Dated: _____

_____
Name of Holder: _____
Title: _____

ANNEX A

SAMPLE WARRANT SHARE CALCULATION

Assumptions:

Stated Principal of Note:	300,000
Date Note Issued:	15-Dec
Date of Qualified Equity Financing	8-Feb

Formula

[WS x (HN/BN)] x [(D/30) x 0.20]

Computation:

WS =	500,000.00
HN =	300,000.00
BN=	2,000,000.00
D=	55
SP=	$2.50

[[500,000 x ($300,000/$2,000,000)] x [(55/30) x 0.2]]/ $2.50 = 11,000

Exhibit 10.6

THIS WARRANT HAS BEEN TAKEN FOR INVESTMENT, HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED OR THE SECURITIES LAWS OF ANY STATE, AND MAY NOT BE SOLD, TRANSFERRED, ASSIGNED, PLEDGED, HYPOTHECATED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION OR AN EXEMPTION THEREFROM UNDER SUCH LAWS.

GLYCOMIMETICS, INC.

Common Stock Purchase Warrant

Warrant Issue Date: June , 2008 Warrant No. [ ]

GlycoMimetics, Inc., a Delaware corporation (the ***"Company"***), hereby certifies that, for value received, [ ] or its assigns or transferees (the ***"Holder"***), is entitled, subject to the terms set forth below, to purchase from the Company at any time during the period commencing on the Exercise Start Date (as hereinafter defined) and ending at 5:00 P.M., New York time, on the tenth (10^{th}) anniversary of the date hereof (the ***"Expiration Date"***), up to the number of shares of Common Stock as determined pursuant to Section 1(a) below (the ***"Warrant Shares"***), at the Exercise Price (as hereinafter defined). The number and character of the Warrant Shares and the Exercise Price are subject to adjustment as provided herein.

The term "Warrant" as used herein shall include this Warrant and any warrants delivered in substitution or exchange therefor as provided herein. This Warrant is one in the Company's Common Stock purchase warrants (collectively, the ***"Bridge Warrants"***) issued concurrently with the issuance of those certain convertible unsecured promissory notes in the aggregate principal amount of $5 million (the ***"Bridge Notes"***) including such convertible unsecured promissory note (the ***"Note"***) issued to the Holder. Each of the Warrants is substantially similar. Capitalized terms used but not otherwise defined herein have the meanings ascribed to them in the Note.

The following terms, unless the context otherwise requires, have the following respective meanings for purposes of this Warrant:

(a) ***"Common Stock"*** includes (i) the Company's Common Stock, $0.001 par value per share, and (ii) any other securities into which or for which any of the securities described in (i) may be converted or exchanged pursuant to a plan of recapitalization, reorganization, merger, sale of assets or other similar corporate rearrangement.

(b) ***"Exercise Period"*** means the period commencing on the Exercise Start Date and ending on the Expiration Date.

(c) ***"Exercise Price"*** means $0.01 per Warrant Share.

(d) ***"Exercise Start Date"*** means the date hereof.

(e) ***"Qualified Equity Financing"*** means the date on which the Company consummates an equity financing pursuant to which it sells shares of its preferred stock with an aggregate sales price of not less than $ 10,000,000 including any and all convertible promissory notes which are converted into such preferred stock (including the Bridge Notes), and with the principal purpose of raising capital.

1. Exercise of Warrant.

(a) Calculation of Warrant Shares. The number of Warrant Shares the Holder is permitted to purchase is determined by reference to the following formula:

[[WS x (HN/BN)] x [(D/30) x 0.20]]/SP where:

WS = 1,250,000
HN = The stated principal amount of the Note on the date of its issuance
BN = $5,000,000
D = The lesser of (i) the actual number of calendar days elapsed between (x) the date hereof and (y) the date the Note is converted or repaid in full or (ii) 150.
SP = The price per share of Financing Stock sold in the Qualified Equity Financing; provided, however, that if no Qualified Equity Financing has occurred prior to the date this Warrant is exercised, then SP shall equal $0.7845.

An example of the calculation is set forth on Annex A hereto.

(b) Full Exercise. This Warrant may be exercised by the Holder by surrender of this Warrant, with the form of subscription attached hereto (the **"Subscription Notice"**) duly executed by the Holder to the Company at its principal office, accompanied by payment, in cash or by certified or official bank check payable to the order of the Company, in the amount obtained by multiplying the number of Warrant Shares by the applicable Exercise Price.

(c) Partial Exercise. This Warrant may be exercised in part by surrender of the Warrant in the manner and at the place provided in Section 1(b) except that the amount payable by the Holder on such partial exercise shall be the amount obtained by multiplying (i) the number of Warrant Shares designated by the Holder in the Subscription Notice by (ii) the applicable Exercise Price. On any such partial exercise the Company at its expense will forthwith issue and deliver to or upon the order of the Holder a new warrant or warrants of like tenor, in the name of the Holder or as the Holder (upon payment by the Holder of any applicable transfer taxes) may request, calling in the aggregate on the face or faces thereof for the number of shares of Common Stock for which such warrant or warrants may still be exercised.

(d) Exercise by Exchange of Warrant. In addition to and without limiting the rights of the Holder under the terms hereof, this Warrant may be exercised by being exchanged

in whole or in part at any time during the Exercise Period for the number of shares of Common Stock having an aggregate fair market value as reasonably determined by the Company's board of directors) on the date of such exercise equal to the difference between (i) the fair market value on the date of the exercise of a number of Warrant Shares (the **"Exchange Shares"**) designated by the Holder on the date of exercise to be exchanged for such shares Common Stock and (ii) the aggregate Exercise Price otherwise payable by the Holder for such Exchange Shares. Upon any such exercise, the number of Warrant Shares purchasable upon exercise of this Warrant shall be reduced by the sum of (x) the number of such Exchange Shares and (y) the number of Warrant Shares acquired hereunder using said Exchange Shares, if a balance of purchasable Warrant Shares remains after such exercise, the Company shall execute and deliver to the Holder a new Warrant for such balance of Warrant Shares. No payment of any cash or other consideration shall be required or permitted. Such exchange shall be effective upon the date of receipt by the Company of the original Warrant surrendered for cancellation and a written request from the Holder that the exchange pursuant to this Section 1(d) be made, or at such later date as may be specified in such request. No fractional shares arising out of the above formula for determining the number of shares issuable in such exchange shall be issued, and the Company shall in lieu thereof make payment to the Holder of cash in the amount of such fraction multiplied by the then current market value of such securities on the date of the exchange.

(e) Company Acknowledgment. The Company will, at the time of the exercise of this Warrant and upon the request of the Holder, acknowledge in writing its continuing obligation to afford to the Holder any rights to which the Holder shall continue to be entitled after such exercise in accordance with the provisions of this Warrant. If the Holder shall fail to make any such request, such failure shall not affect the continuing obligation of the Company to afford to the Holder any such rights.

2. Delivery of Stock Certificates, on Exercise. As soon as practicable after the exercise of this Warrant in full or in part, and in any event within five (5) days thereafter, the Company, at its expense (including the payment by it of any applicable issue taxes), will cause to be issued in the name of and delivered to the Holder, or as the Holder (upon payment by the Holder of any applicable transfer taxes) may direct, a certificate or certificates for the number of fully paid and non-assessable Warrant Shares to which the Holder shall be entitled on such exercise, plus, in lieu of any fractional share to which the Holder would otherwise be entitled, cash equal to such fraction multiplied by the then current market value of one (1) full share, together with any other stock or other securities and property (including cash, where applicable) to which the Holder is entitled upon such exercise pursuant to Section 1 or otherwise.

3. Adjustment for Dividends in Other Stock, Property, Reclassification. In case at any time or from time to time, the holders of Warrant Shares shall have received, or (on or after the record date fixed for the determination of shareholders eligible to receive) shall have become entitled to receive, without payment therefor,

(a) other or additional stock or other securities or property (other than cash) by way of dividend, or

(b) any cash (excluding cash dividends payable solely out of earnings or earned surplus of the Company), or

(c) other or additional stock or other securities or property (including cash) by way of spin-off, split-up, reclassification, recapitalization, combination of shares or similar corporate rearrangement,

other than additional shares of Warrant Shares issued as a stock dividend or in a stock-split (adjustments in respect of which are provided for in Section 5), then and in each such case the Holder, on the exercise hereof as provided in Section 1, shall be entitled to receive the amount of stock and other securities and property (including cash in the cases referred to in subdivisions (b) and (c) of this Section 3) that Holder would hold on the date of such exercise if on the date hereof the Holder had been the holder of record of the number of Warrant Shares into which this Warrant was exercisable into as of such date and had thereafter, during the period from the date hereof to and including the date of such exercise, retained such shares and all such other or additional stock and other securities and property (including cash in the cases referred to in Sections 3(b) and 3(c)) receivable by the Holder as aforesaid during such period, giving effect to all adjustments called for during such period by Sections 4 and 5.

4. Adjustment for Reorganization, Consolidation, Merger.

(a) General. In case at any time or from time to time, the Company shall (i) effect a reorganization, (ii) consolidate with or merge into any other person, or (iii) transfer all or substantially all of its properties or assets to any other person under any plan or arrangement contemplating the dissolution of the Company, then, in each such case, except as otherwise provided in Section 4(c), the holder of this Warrant, on the exercise hereof, as provided in Section 1, at any time after the consummation of such reorganization, consolidation or merger or the effective date of such dissolution, as the case may be, shall receive, in lieu of the Warrant Shares issuable on such exercise prior to such consummation or such effective date, the stock and other securities and property (including cash) to which such holder would have been entitled upon such consummation or in connection with such dissolution, as the case may be, if such holder had so exercised this Warrant immediately prior thereto, all subject to further adjustment thereafter as provided in Sections 3 and 5.

(b) Dissolution. Except as otherwise provided in Section 4(c) hereof, in the event of any dissolution of the Company following the transfer of all or substantially all of its properties or assets, the Company, prior to such dissolution, shall at its expense deliver or cause to be delivered the stock and other securities and property (including cash, where applicable) receivable by the holders of this Warrant after the effective date of such dissolution pursuant to this Section 4 to a bank or trust company, as trustee for the holder or holders of this Warrant.

(c) Continuation of Terms. Except as otherwise provided herein, upon any reorganization, consolidation, merger or transfer (and any dissolution following any transfer) referred to in this Section 4, this Warrant shall continue in full force and effect and the terms hereof shall be applicable to the shares of stock and other securities and property receivable on the exercise of this Warrant after the consummation of such reorganization, consolidation or

merger or the effective date of dissolution following any such transfer, as the case may be, and shall be binding upon the issuer of any such stock or other securities, including, in the case of any such transfer, the person acquiring all or substantially all of the properties or assets of the Company, whether or not such person shall have expressly assumed the terms of this Warrant.

5. Adjustment for Extraordinary Events. In the event that the Company shall (a) issue additional shares of Common Stock as a dividend or other distribution on outstanding Common Stock, (b) subdivide its outstanding shares of Common Stock, or (c) combine its outstanding shares of Common Stock into a smaller number of shares of Common Stock (any such event, an ***"Extraordinary Event"***), then, in each such Extraordinary Event, the Exercise Price shall, simultaneously with the happening of such Extraordinary Event, be adjusted by multiplying the then Exercise Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such Extraordinary Event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after such Extraordinary Event, and the product so obtained shall thereafter be the Exercise Price then in effect, provided, however, that in no event shall the Exercise Process be less than the then applicable par value of a share of Common Stock.

The Exercise Price, as so adjusted, shall be readjusted in the same manner upon the happening of any successive Extraordinary Event or Extraordinary Events. The holder of this Warrant shall thereafter, on the exercise hereof as provided in Section 1, be entitled to receive that number of Warrant Shares determined by multiplying the number of shares of Common Stock, as applicable, which would otherwise (but for the provisions of this Section 5) be issuable on such exercise by a fraction, the numerator of which is the Exercise Price that would otherwise (but for the provisions of this Section 5) be in effect, and the denominator of which is the Exercise Price in effect on the date of such exercise. Notwithstanding the foregoing, in no event shall the Exercise Process be less than the then applicable par value of a share of Common Stock

6. Certificate as to Adjustments. In each case of any adjustment or readjustment in the Warrant Shares issuable on the exercise of this Warrant, the Company at its expense will promptly cause its Treasurer or Chief Financial Officer to compute such adjustment or readjustment in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company will, as soon as practical, mail a copy of each such certificate to any holder of this Warrant, and will, on the written request at any time of any holder of this Warrant, furnish to the Holder a like certificate setting forth the number of Warrant Shares that the Holder may purchase pursuant to this Warrant, the Exercise Price then in effect, and the manner in which the foregoing was calculated.

7. Notices of Record Date, Etc. In the event of:

(a) any taking by the Company of a record of the holders of any class or securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right, or

(b) any capital reorganization of the Company, any reclassification or recapitalization of the capital stock of the Company or any transfer of all or substantially all the assets of the Company to or consolidation or merger of the Company with or into any other person, or any voluntary or involuntary dissolution, liquidation or winding-up of the Company,

then and in each such event the Company will mail or cause to be mailed to any holder of this Warrant a notice specifying (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, (ii) the date on which any such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding-up is to take place, and the time, if any is to be fixed, as of which the Holders of record of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable on such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding-up, and (iii) the amount and character of any stock or other securities, or rights or options with respect thereto, proposed to be issued or granted, the date of such proposed issue or grant and the persons or class of persons to whom such proposed issue or grant is to be offered or made. Such notice shall be mailed at least 20 days prior to the date specified in such notice on which any such action is to be taken.

8. Securities Law Matters.

(a) Neither this Warrant nor the securities issuable upon exercise of this Warrant have been registered under the Securities Act of 1933 (the **"Securities Act"**) or any state securities laws (together with the Securities Act, the **"Acts"**). Therefore, in order, among other things, to ensure compliance with the Acts notwithstanding anything else in the Warrant to contrary, the Holder of this Warrant, including any successive Holder, agrees by accepting this Warrant as follows: This Warrant and the securities which may be issued upon the exercise hereof, may not be exercised, sold, transferred, pledged or hypothecated in the absence of (i) an effective registration statement or post-effective amendment thereto for such Warrants or the securities into which this Warrant is exercisable, respectively, under the Acts, or (ii) the Holder's delivery to the Borrower of an opinion of counsel, reasonably satisfactory to the Borrower that an exemption from the registration requirements of the Acts is available. The Holder of this Warrant, including any successive Warrant, further represents and warrants by accepting this Warrant that such Holder is an "Accredited Investor" as such term is defined in the Securities Act (and the regulations promulgated thereunder) and this Warrant and any securities issuable upon exercise of this Warrant are being acquired for investment, and not with a view to distribution or resale, within the meaning of the Securities Act. Upon exercise of this Warrant, the persons entitled to receive the shares of securities into which this Warrant is exercisable may be required to execute and deliver to the Company such other documents and instruments, in form reasonably satisfactory to the Company to effect the compliance of the issuance of this Warrant and the securities issuable on exercise of this Warrant with the Acts.

(b) Legend on Shares. Each certificate for securities initially issued upon exercise of this Warrant, unless at the time of exercise such shares are registered under the Acts, shall bear substantially the following legend (and any additional legend required under said Acts or otherwise):

> **"The securities represented by this Certificate have not been registered under the Securities Act of 1933 or any state securities acts (the "Acts") and cannot be transferred except (i) pursuant to a registration statement effective under the Acts, or (ii) pursuant to an exemption from the registration requirements of the Acts."**

Any certificate issued at any time in exchange or substitution for any certificate bearing such legend (except a new certificate issued upon completion of a public distribution pursuant to a registration statement under the Acts of the securities represented thereby) shall also bear such legend unless, in the reasonable opinion of counsel for the Company, the securities represented thereby need no longer be subject to the transfer restrictions contained in this Warrant. The conversion and transfer restriction provisions of this Warrant shall be binding upon all successive Holders of this Warrant.

9. Amendment. The terms of this Warrant may be amended, modified or waived only with the written consent of the Company and the holders holding Bridge Warrants representing 75% of the aggregate Warrant Shares into which the Bridge Warrants are then exercisable.

10. Reservation of Stock. The Company will at all times reserve and keep available, solely for issuance and delivery on the exercise of this Warrant, all Warrant Shares from time to time issuable on the exercise hereof.

11. Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction of this Warrant, on delivery of an indemnity agreement mutually agreeable to the Company and the Holder or, in the case of any such mutilation, on surrender and cancellation of such Warrant, the Company at its expense will execute and deliver, in lieu thereof, a new substantially identical warrant.

12. Warrant Agent. The Company may, by written notice to the Holder, appoint an agent for the purpose of issuing Warrant Shares on the exercise of this Warrant pursuant to Section 1 and replacing this Warrant pursuant to Section 11, or any of the foregoing, and thereafter any such issuance, exchange or replacement, as the case may be, shall be made at such office by such agent.

13. Remedies. The Company stipulates that the remedies at law of the Holder, in the event of any default or threatened default by the Company in the performance of or compliance with any of the terms of this Warrant, are not and will not be adequate, and that such terms may be specifically enforced by a decree for the specific performance of any agreement contained herein or by an injunction against a violation of any of the terms hereof or otherwise.

14. Negotiability, Etc. This Warrant is issued upon the following terms, to all of which any holder or owner hereof by the taking hereof consents and agrees:

(a) title to this Warrant may be transferred by endorsement (by the Holder executing the form of assignment at the end hereof) and delivery in the same manner as in the case of a negotiable instrument transferable by endorsement and delivery;

(b) any person in possession of this Warrant properly endorsed is authorized to represent himself as absolute owner hereof and is empowered to transfer absolute title hereto by endorsement and delivery hereof to a bona fide purchaser hereof for value; each prior taker or owner waives and renounces all of his equities or rights in this Warrant in favor of each such bona fide purchaser, and each such bona fide purchaser shall acquire absolute title hereto and to all rights represented hereby; and

(c) until this Warrant is transferred on the books of the Company, the Company may treat the registered Holder as the absolute owner hereof for all purposes, notwithstanding any notice to the contrary.

15. Notices, Etc. All notices and other communications from the Company to the Holder of this Warrant shall be mailed by first class registered or certified mail, postage prepaid, at such address as may have been furnished to the Company in writing by the Holder or, until any the Holder furnishes to the Company an address, then to, and at the address of, the last holder of this Warrant who has so furnished an address to the Company.

16. Governing Law. This Warrant shall be governed by, and construed in accordance with, the laws of the State of Delaware.

17. Miscellaneous. This Warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought. The headings in this Warrant are for purposes of reference only, and shall not limit or otherwise affect any of the terms hereof. This Warrant is being executed as an instrument under seal. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Common Stock Purchase Warrant No. [ ] to be executed and delivered on its behalf by one of its duly authorized officers as of the date first written above.

GLYCOMIMETICS, INC.

By: _____

Rachel King
President and CEO

FORM OF SUBSCRIPTION

(To be signed only on exercise of Warrant)

TO: GlycoMimetics, Inc.

The undersigned, the Holder of the within Warrant, hereby irrevocably elects to exercise this Warrant for, and to purchase thereunder, shares of Common Stock of GlycoMimetics, Inc. and herewith makes payment of $ therefor, and requests that the certificates for such shares be issued in the name of, and delivered to , whose address is .

Dated: _____

_____

Name of Holder: _____

Title: _____

FORM OF ASSIGNMENT
(To be signed only on transfer of Warrant)

For value received, the undersigned hereby sells, assigns, and transfers unto the right represented by the Common Stock Purchase Warrant No. to purchase that number of shares of Common Stock of GlycoMimetics, Inc. to which the such Warrant relates, and appoints attorney-in-fact to transfer such right on the books of GlycoMimetics, Inc. with full power of substitution in the premises.

Dated: _____

_____
Name of Holder: _____
Title: _____

ANNEX A

SAMPLE WARRANT SHARE CALCULATION

Assumptions:

Stated Principal of Note:	300,000
Date Note Issued:	1-July
Date of Note Converted or Repaid in Full:	1-Nov

Formula

[WS x (HN/BN)] x [(D/30) x 0.20]

Computation:

WS =	1,250,000.00
HN =	300,000.00
BN=	5,000,000.00
D=	123
SP=	$2.50

[[1,250,000 x ($300,000/$5,000,000)] x [(123/30) x 0.2]]/ $2.50 = 24,600

Exhibit 10.7

THIS WARRANT HAS BEEN TAKEN FOR INVESTMENT, HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED OR THE SECURITIES LAWS OF ANY STATE, AND MAY NOT BE SOLD, TRANSFERRED, ASSIGNED, PLEDGED, HYPOTHECATED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION OR AN EXEMPTION THEREFROM UNDER SUCH LAWS.

GLYCOMIMETICS, INC.

Common Stock Purchase Warrant

Warrant Issue Date: January 16 or 30, 2009 Warrant No. 2009-

GlycoMimetics, Inc., a Delaware corporation (the ***"Company"***), hereby certifies that, for value received, or its assigns or transferees (the ***"Holder"***), is entitled, subject to the terms set forth below, to purchase from the Company at any time during the period commencing on the Exercise Start Date (as hereinafter defined) and ending at 5:00 P.M., New York time, on the tenth (10^{th}) anniversary of the date hereof (the ***"Expiration Date"***), up to the number of shares of Common Stock as determined pursuant to Section 1(a) below (the ***"Warrant Shares"***), at the Exercise Price (as hereinafter defined). The number and character of the Warrant Shares and the Exercise Price are subject to adjustment as provided herein.

The term "Warrant" as used herein shall include this Warrant and any warrants delivered in substitution or exchange therefor as provided herein. This Warrant is one of the Company's Common Stock purchase warrants (collectively, the ***"Bridge Warrants"***) issued concurrently with the issuance of those certain convertible unsecured promissory notes in the aggregate principal amount of up to $7,000,000 (the ***"Bridge Notes"***) issued on January 16, 2009 or January 30, 2009, including such convertible unsecured promissory note (the ***"Note"***) issued to the Holder. Each of the Warrants is substantially similar. Capitalized terms used but not otherwise defined herein have the meanings ascribed to them in the Note.

The following terms, unless the context otherwise requires, have the following respective meanings for purposes of this Warrant:

(a) ***"Common Stock"*** includes (i) the Company's Common Stock, $0.001 par value per share, and (ii) any other securities into which or for which any of the securities described in (i) may be converted or exchanged pursuant to a plan of recapitalization, reorganization, merger, sale of assets or other similar corporate rearrangement.

(b) ***"Exercise Period"*** means the period commencing on the Exercise Start Date and ending on the Expiration Date.

(c) ***"Exercise Price"*** means $0.01 per Warrant Share.

(d) ***"Exercise Start Date"*** means the date hereof.

(e) ***"Qualified Equity Financing"*** means the date on which the Company consummates an equity financing pursuant to which it sells shares of its preferred stock with an aggregate sales price of not less than $5,000,000 excluding any and all convertible promissory notes which are converted into such preferred stock (including the Bridge Notes), and with the principal purpose of raising capital.

1. Exercise of Warrant.

(a) Calculation of Warrant Shares. The number of Warrant Shares the Holder is permitted to purchase is determined by reference to the following formula:

WS = [[0.25 x HN] x [(D/30) x 0.20]]/SP where:

WS = Number of Warrant Shares Holder is permitted to purchase
HN = The stated principal amount of the Note on the date of its issuance
D = The lesser of (i) the actual number of calendar days elapsed between (x) the date hereof and (y) the date the Note is converted or repaid in full or (ii) 150.
SP = The price per share of Financing Stock sold in the Qualified Equity Financing; provided, however, that if no Qualified Equity Financing has occurred prior to the date this Warrant is exercised, then SP shall equal $0.7845.

An example of the calculation is set forth on Annex A hereto.

(b) Full Exercise. This Warrant may be exercised by the Holder by surrender of this Warrant, with the form of subscription attached hereto (the "Subscription Notice") duly executed by the Holder to the Company at its principal office, accompanied by payment, in cash or by certified or official bank check payable to the order of the Company, in the amount obtained by multiplying the number of Warrant Shares by the applicable Exercise Price.

(c) Partial Exercise. This Warrant may be exercised in part by surrender of the Warrant in the manner and at the place provided in Section 1(b) except that the amount payable by the Holder on such partial exercise shall be the amount obtained by multiplying (i) the number of Warrant Shares designated by the Holder in the Subscription Notice by (ii) the applicable Exercise Price. On any such partial exercise the Company at its expense will forthwith issue and deliver to or upon the order of the Holder a new warrant or warrants of like tenor, in the name of the Holder or as the Holder (upon payment by the Holder of any applicable transfer taxes) may request, calling in the aggregate on the face or faces thereof for the number of shares of Common Stock for which such warrant or warrants may still be exercised.

(d) Exercise by Exchange of Warrant. In addition to and without limiting the rights of the Holder under the terms hereof, this Warrant may be exercised by being exchanged in whole or in part at any time during the Exercise Period for the number of shares of Common

Stock having an aggregate fair market value as reasonably determined by the Company's board of directors) on the date of such exercise equal to the difference between (i) the fair market value on the date of the exercise of a number of Warrant Shares (the **"Exchange Shares"**) designated by the Holder on the date of exercise to be exchanged for such shares Common Stock and (ii) the aggregate Exercise Price otherwise payable by the Holder for such Exchange Shares. Upon any such exercise, the number of Warrant Shares purchasable upon exercise of this Warrant shall be reduced by the sum of (x) the number of such Exchange Shares and (y) the number of Warrant Shares acquired hereunder using said Exchange Shares, if a balance of purchasable Warrant Shares remains after such exercise, the Company shall execute and deliver to the Holder a new Warrant for such balance of Warrant Shares. No payment of any cash or other consideration shall be required or permitted. Such exchange shall be effective upon the date of receipt by the Company of the original Warrant surrendered for cancellation and a written request from the Holder that the exchange pursuant to this Section 1(d) be made, or at such later date as may be specified in such request. No fractional shares arising out of the above formula for determining the number of shares issuable in such exchange shall be issued, and the Company shall in lieu thereof make payment to the Holder of cash in the amount of such fraction multiplied by the then current market value of such securities on the date of the exchange.

(e) Company Acknowledgment. The Company will, at the time of the exercise of this Warrant and upon the request of the Holder, acknowledge in writing its continuing obligation to afford to the Holder any rights to which the Holder shall continue to be entitled after such exercise in accordance with the provisions of this Warrant. If the Holder shall fail to make any such request, such failure shall not affect the continuing obligation of the Company to afford to the Holder any such rights.

2. Delivery of Stock Certificates, on Exercise. As soon as practicable after the exercise of this Warrant in full or in part, and in any event within five (5) days thereafter, the Company, at its expense (including the payment by it of any applicable issue taxes), will cause to be issued in the name of and delivered to the Holder, or as the Holder (upon payment by the Holder of any applicable transfer taxes) may direct, a certificate or certificates for the number of fully paid and non-assessable Warrant Shares to which the Holder shall be entitled on such exercise, plus, in lieu of any fractional share to which the Holder would otherwise be entitled, cash equal to such fraction multiplied by the then current market value of one (1) full share, together with any other stock or other securities and property (including cash, where applicable) to which the Holder is entitled upon such exercise pursuant to Section 1 or otherwise.

3. Adjustment for Dividends in Other Stock, Property, Reclassification. In case at any time or from time to time, the holders of Warrant Shares shall have received, or (on or after the record date fixed for the determination of shareholders eligible to receive) shall have become entitled to receive, without payment therefor,

(a) other or additional stock or other securities or property (other than cash) by way of dividend, or

(b) any cash (excluding cash dividends payable solely out of earnings or earned surplus of the Company), or

(c) other or additional stock or other securities or property (including cash) by way of spin-off, split-up, reclassification, recapitalization, combination of shares or similar corporate rearrangement,

other than additional shares of Warrant Shares issued as a stock dividend or in a stock-split (adjustments in respect of which are provided for in Section 5), then and in each such case the Holder, on the exercise hereof as provided in Section 1, shall be entitled to receive the amount of stock and other securities and property (including cash in the cases referred to in subdivisions (b) and (c) of this Section 3) that Holder would hold on the date of such exercise if on the date hereof the Holder had been the holder of record of the number of Warrant Shares into which this Warrant was exercisable into as of such date and had thereafter, during the period from the date hereof to and including the date of such exercise, retained such shares and all such other or additional stock and other securities and property (including cash in the cases referred to in Sections 3(b) and 3(c)) receivable by the Holder as aforesaid during such period, giving effect to all adjustments called for during such period by Sections 4 and 5.

4. Adjustment for Reorganization, Consolidation, Merger.

(a) General. In case at any time or from time to time, the Company shall (i) effect a reorganization, (ii) consolidate with or merge into any other person, or (iii) transfer all or substantially all of its properties or assets to any other person under any plan or arrangement contemplating the dissolution of the Company, then, in each such case, except as otherwise provided in Section 4(c), the holder of this Warrant, on the exercise hereof, as provided in Section 1, at any time after the consummation of such reorganization, consolidation or merger or the effective date of such dissolution, as the case may be, shall receive, in lieu of the Warrant Shares issuable on such exercise prior to such consummation or such effective date, the stock and other securities and property (including cash) to which such holder would have been entitled upon such consummation or in connection with such dissolution, as the case may be, if such holder had so exercised this Warrant immediately prior thereto, all subject to further adjustment thereafter as provided in Sections 3 and 5.

(b) Dissolution. Except as otherwise provided in Section 4(c) hereof, in the event of any dissolution of the Company following the transfer of all or substantially all of its properties or assets, the Company, prior to such dissolution, shall at its expense deliver or cause to be delivered the stock and other securities and property (including cash, where applicable) receivable by the holders of this Warrant after the effective date of such dissolution pursuant to this Section 4 to a bank or trust company, as trustee for the holder or holders of this Warrant.

(c) Continuation of Terms. Except as otherwise provided herein, upon any reorganization, consolidation, merger or transfer (and any dissolution following any transfer) referred to in this Section 4, this Warrant shall continue in full force and effect and the terms hereof shall be applicable to the shares of stock and other securities and property receivable on the exercise of this Warrant after the consummation of such reorganization, consolidation or merger or the effective date of dissolution following any such transfer, as the case may be, and shall be binding upon the issuer of any such stock or other securities, including, in the case of any such transfer, the person acquiring all or substantially all of the properties or assets of the Company, whether or not such person shall have expressly assumed the terms of this Warrant.

5. Adjustment for Extraordinary Events. In the event that the Company shall (a) issue additional shares of Common Stock as a dividend or other distribution on outstanding Common Stock, (b) subdivide its outstanding shares of Common Stock, or (c) combine its outstanding shares of Common Stock into a smaller number of shares of Common Stock (any such event, an ***"Extraordinary Event"***), then, in each such Extraordinary Event, the Exercise Price shall, simultaneously with the happening of such Extraordinary Event, be adjusted by multiplying the then Exercise Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such Extraordinary Event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after such Extraordinary Event, and the product so obtained shall thereafter be the Exercise Price then in effect, provided, however, that in no event shall the Exercise Process be less than the then applicable par value of a share of Common Stock.

The Exercise Price, as so adjusted, shall be readjusted in the same manner upon the happening of any successive Extraordinary Event or Extraordinary Events. The holder of this Warrant shall thereafter, on the exercise hereof as provided in Section 1, be entitled to receive that number of Warrant Shares determined by multiplying the number of shares of Common Stock, as applicable, which would otherwise (but for the provisions of this Section 5) be issuable on such exercise by a fraction, the numerator of which is the Exercise Price that would otherwise (but for the provisions of this Section 5) be in effect, and the denominator of which is the Exercise Price in effect on the date of such exercise. Notwithstanding the foregoing, in no event shall the Exercise Process be less than the then applicable par value of a share of Common Stock

6. Certificate as to Adjustments. In each case of any adjustment or readjustment in the Warrant Shares issuable on the exercise of this Warrant, the Company at its expense will promptly cause its Treasurer or Chief Financial Officer to compute such adjustment or readjustment in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company will, as soon as practical, mail a copy of each such certificate to any holder of this Warrant, and will, on the written request at any time of any holder of this Warrant, furnish to the Holder a like certificate setting forth the number of Warrant Shares that the Holder may purchase pursuant to this Warrant, the Exercise Price then in effect, and the manner in which the foregoing was calculated.

7. Notices of Record Date, Etc. In the event of:

(a) any taking by the Company of a record of the holders of any class or securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right, or

(b) any capital reorganization of the Company, any reclassification or recapitalization of the capital stock of the Company or any transfer of all or substantially all the assets of the Company to or consolidation or merger of the Company with or into any other person, or any voluntary or involuntary dissolution, liquidation or winding-up of the Company,

then and in each such event the Company will mail or cause to be mailed to any holder of this Warrant a notice specifying (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, (ii) the date on which any such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding-up is to take place, and the time, if any is to be fixed, as of which the Holders of record of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable on such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding-up, and (iii) the amount and character of any stock or other securities, or rights or options with respect thereto, proposed to be issued or granted, the date of such proposed issue or grant and the persons or class of persons to whom such proposed issue or grant is to be offered or made. Such notice shall be mailed at least 20 days prior to the date specified in such notice on which any such action is to be taken.

8. Securities Law Matters.

(a) Neither this Warrant nor the securities issuable upon exercise of this Warrant have been registered under the Securities Act of 1933 (the **"Securities Act"**) or any state securities laws (together with the Securities Act, the **"Acts"**). Therefore, in order, among other things, to ensure compliance with the Acts notwithstanding anything else in the Warrant to contrary, the Holder of this Warrant, including any successive Holder, agrees by accepting this Warrant as follows: This Warrant and the securities which may be issued upon the exercise hereof, may not be sold, transferred, pledged or hypothecated in the absence of (i) an effective registration statement or post-effective amendment thereto for such Warrants or the securities into which this Warrant is exercisable, respectively, under the Acts, or (ii) the Holder's delivery to the Borrower of an opinion of counsel, reasonably satisfactory to the Borrower that an exemption from the registration requirements of the Acts is available; provided, that the securities into which this Warrant is exercisable may be transferred by the Holder to its affiliates without satisfying the immediately preceding (i) and (ii) conditions. The Holder of this Warrant, including any successive Warrant, further represents and warrants by accepting this Warrant that such Holder is an "Accredited Investor" as such term is defined in the Securities Act (and the regulations promulgated thereunder) and this Warrant and any securities issuable upon exercise of this Warrant are being acquired for investment, and not with a view to distribution or resale, within the meaning of the Securities Act. Upon exercise of this Warrant, the persons entitled to receive the shares of securities into which this Warrant is exercisable may be required to execute and deliver to the Company such other documents and instruments, in form reasonably satisfactory to the Company to effect the compliance of the issuance of this Warrant and the securities issuable on exercise of this Warrant with the Acts.

(b) Legend on Shares. Each certificate for securities initially issued upon exercise of this Warrant, unless at the time of exercise such shares are registered under the Acts, shall bear substantially the following legend (and any additional legend required under said Acts or otherwise):

> **"The securities represented by this Certificate have not been registered under the Securities Act of 1933 or any state securities acts (the "Acts") and cannot be transferred except (i) pursuant to a registration statement effective under the Acts, or (ii) pursuant to an exemption from the registration requirements of the Acts."**

Any certificate issued at any time in exchange or substitution for any certificate bearing such legend (except a new certificate issued upon completion of a public distribution pursuant to a registration statement under the Acts of the securities represented thereby) shall also bear such legend unless, in the reasonable opinion of counsel for the Company, the securities represented thereby need no longer be subject to the transfer restrictions contained in this Warrant. The conversion and transfer restriction provisions of this Warrant shall be binding upon all successive Holders of this Warrant.

9. Amendment. The terms of this Warrant may be amended, modified or waived only with the written consent of the Company and the holders holding Bridge Warrants representing 75% of the aggregate Warrant Shares into which the Bridge Warrants are then exercisable.

10. Reservation of Stock. The Company will at all times reserve and keep available, solely for issuance and delivery on the exercise of this Warrant, all Warrant Shares from time to time issuable on the exercise hereof.

11. Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction of this Warrant, on delivery of an indemnity agreement mutually agreeable to the Company and the Holder or, in the case of any such mutilation, on surrender and cancellation of such Warrant, the Company at its expense will execute and deliver, in lieu thereof, a new substantially identical warrant.

12. Warrant Agent. The Company may, by written notice to the Holder, appoint an agent for the purpose of issuing Warrant Shares on the exercise of this Warrant pursuant to Section 1 and replacing this Warrant pursuant to Section 11, or any of the foregoing, and thereafter any such issuance, exchange or replacement, as the case may be, shall be made at such office by such agent.

13. Remedies. The Company stipulates that the remedies at law of the Holder, in the event of any default or threatened default by the Company in the performance of or compliance with any of the terms of this Warrant, are not and will not be adequate, and that such terms may be specifically enforced by a decree for the specific performance of any agreement contained herein or by an injunction against a violation of any of the terms hereof or otherwise.

14. Negotiability, Etc. This Warrant is issued upon the following terms, to all of which any holder or owner hereof by the taking hereof consents and agrees:

(a) title to this Warrant may be transferred by endorsement (by the Holder executing the form of assignment at the end hereof) and delivery in the same manner as in the case of a negotiable instrument transferable by endorsement and delivery;

(b) any person in possession of this Warrant properly endorsed is authorized to represent himself as absolute owner hereof and is empowered to transfer absolute title hereto by endorsement and delivery hereof to a bona fide purchaser hereof for value; each prior taker or owner waives and renounces all of his equities or rights in this Warrant in favor of each such bona fide purchaser, and each such bona fide purchaser shall acquire absolute title hereto and to all rights represented hereby; and

(c) until this Warrant is transferred on the books of the Company, the Company may treat the registered Holder as the absolute owner hereof for all purposes, notwithstanding any notice to the contrary.

15. Notices, Etc. All notices and other communications from the Company to the Holder of this Warrant shall be mailed by first class registered or certified mail, postage prepaid, at such address as may have been furnished to the Company in writing by the Holder or, until any the Holder furnishes to the Company an address, then to, and at the address of, the last holder of this Warrant who has so furnished an address to the Company.

16. Governing Law. This Warrant shall be governed by, and construed in accordance with, the laws of the State of Delaware.

17. Miscellaneous. This Warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought. The headings in this Warrant are for purposes of reference only, and shall not limit or otherwise affect any of the terms hereof. This Warrant is being executed as an instrument under seal. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Common Stock Purchase Warrant No. 2009- to be executed and delivered on its behalf by one of its duly authorized officers as of the date first written above.

GLYCOMIMETICS, INC.

By: _____

Rachel King
President and CEO

SIGNATURE PAGE TO COMMON STOCK PURCHASE WARRANT NO. 2009-

FORM OF SUBSCRIPTION

(To be signed only on exercise of Warrant)

TO: GlycoMimetics, Inc.

The undersigned, the Holder of the within Warrant, hereby irrevocably elects to exercise this Warrant for, and to purchase thereunder, shares of Common Stock of GlycoMimetics, Inc. and herewith makes payment of $ therefor, and requests that the certificates for such shares be issued in the name of, and delivered to , whose address is .

Dated: _____

_____

Name of Holder: _____

Title: _____

FORM OF ASSIGNMENT
(To be signed only on transfer of Warrant)

For value received, the undersigned hereby sells, assigns, and transfers unto the right represented by the Common Stock Purchase Warrant No. to purchase that number of shares of Common Stock of GlycoMimetics, Inc. to which the such Warrant relates, and appoints attorney-in-fact to transfer such right on the books of GlycoMimetics, Inc. with full power of substitution in the premises.

Dated: _____

_____
Name of Holder: _____
Title: _____

ANNEX A

SAMPLE WARRANT SHARE CALCULATION

Assumptions:

Stated Principal of Note (HN):	300,000
Date Note Issued:	16-Jan
Date of Note Converted or Repaid in Full:	16-May

Formula

[.25 x HN] x [(D/30) x 0.20]

Computation:

HN =	300,000.00
D=	120
SP=	$2.50

[[0.25 x $300,000] x [(120/30) x 0.2]]/ $2.50 = 24,000

GLYCOMIMETICS, INC.

2003 STOCK INCENTIVE PLAN

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GLYCOMIMETICS, INC.

2003 STOCK INCENTIVE PLAN

GlycoMimetics, Inc., a Delaware corporation (the "Company"), sets forth herein the terms of its 2003 Stock Incentive Plan (the "Plan") as follows:

1. PURPOSE

The Plan is intended to enhance the Company's and its Affiliates' (as defined herein) ability to attract and retain highly qualified officers, directors, key employees, and other persons, and to motivate such officers, directors, key employees, and other persons to serve the Company and its Affiliates and to expend maximum effort to improve the business results and earnings of the Company, by providing to such officers, directors, key employees and other persons an opportunity to acquire or increase a direct proprietary interest in the operations and future success of the Company. To this end, the Plan provides for the grant of stock options and restricted stock in accordance with the terms hereof. Stock options granted under the Plan may be nonqualified stock options or incentive stock options, as provided herein.

2. DEFINITIONS

For purposes of interpreting the Plan and related documents (including Award Agreements), the following definitions shall apply:

2.1 "***Affiliate***" means, with respect to the Company, any company or other trade or business that controls, is controlled by or is under common control with the Company within the meaning of Rule 405 of Regulation C under the Securities Act, including, without limitation, any Subsidiary.

2.2 "***Award Agreement***" means the stock option agreement, restricted stock agreement or other written agreement between the Company and a Grantee that evidences and sets out the terms and conditions of a Grant.

2.3 "***Benefit Arrangement***" shall have the meaning set forth in **Section 13** hereof.

2.4 "***Board***" means the Board of Directors of the Company.

2.5 "***Cause***" means, as determined by the Board and unless otherwise provided in an applicable employment agreement with the Company or an Affiliate, (i) gross negligence or willful misconduct in connection with the performance of duties; (ii) conviction of a criminal offense (other than minor traffic offenses); or (iii) material breach of any term of any employment, consulting or other services, confidentiality, intellectual property or non-competition agreements, if any, between the Service Provider and the Company or an Affiliate.

2.6 "***Change of Control***" means (i) the dissolution or liquidation of the Company or a merger, consolidation, or reorganization of the Company with one or more other entities in

which the Company is not the surviving entity, (ii) a sale of substantially all of the assets of the Company to another person or entity, or (iii) any transaction (including without limitation a merger or reorganization in which the Company is the surviving entity) which results in any person or entity (other than persons who are shareholders or Affiliates immediately prior to the transaction) owning 60% or more of the combined voting power of all classes of stock of the Company.

2.7 "***Code***" means the Internal Revenue Code of 1986, as now in effect or as hereafter amended.

2.8 "***Committee***" means a committee of, and designated from time to time by resolution of, the Board, which shall consist of one or more members of the Board.

2.9 "***Company***" means GlycoMimetics, Inc.

2.10 "***Disability***" means the Grantee is unable to perform each of the essential duties of such Grantee's position by reason of a medically determinable physical or mental impairment which is potentially permanent in character or which can be expected to last for a continuous period of not less than 12 months; provided, however, that, with respect to rules regarding expiration of an Incentive Stock Option following termination of the Grantee's Service, Disability shall mean the Grantee is unable to engage in any substantial gainful activity by reason of a medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months.

2.11 "***Effective Date***" means May 20, 2003, the date the Plan is approved by the Board.

2.12 "***Exchange Act***" means the Securities Exchange Act of 1934, as now in effect or as hereafter amended.

2.13 "***Fair Market Value***" means the value of a share of Stock, determined as follows: if on the Grant Date or other determination date the Stock is listed on an established national or regional stock exchange, is admitted to quotation on The Nasdaq Stock Market, Inc., or is publicly traded on an established securities market, the Fair Market Value of a share of Stock shall be the closing price of the Stock on such exchange or in such market (if there is more than one such exchange or market the Board shall determine the appropriate exchange or market) on the Grant Date or such other determination date (or if there is no such reported closing price, the Fair Market Value shall be the mean between the highest bid and lowest asked prices or between the high and low sale prices on such trading day) or, if no sale of Stock is reported for such trading day, on the next preceding day on which any sale shall have been reported. If the Stock is not listed on such an exchange, quoted on such system or traded on such a market, Fair Market Value shall be the value of the Stock as determined by the Board in good faith.

2.14 "***Family Member***" means a person who is a spouse, former spouse, child, stepchild, grandchild, parent, stepparent, grandparent, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother, sister, brother-in-law, or sister-in-law, including adoptive relationships, of the Grantee, any person sharing the Grantee's household (other than a

tenant or employee), a trust in which any one or more these persons have more than fifty percent of the beneficial interest, a foundation in which any one or more of these persons (or the Grantee) control the management of assets, and any other entity in which one or more these persons (or the Grantee) own more than fifty percent of the voting interests, provided, however, that to the extent required by applicable law, the term Family Member shall be limited to a person who is a spouse, former spouse, child, stepchild, grandchild, parent, stepparent, grandparent, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother, sister, brother-in-law, or sister-in-law, including adoptive relationships, of the Grantee or a trust or foundation for the exclusive benefit of any one or more of these persons.

2.15 "***Grant***" means an award of an Option or Restricted Stock under the Plan.

2.16 "***Grant Date***" means, as determined by the Board, the latest to occur of (i) the date as of which the Board approves a Grant, (ii) the date on which the recipient of a Grant first becomes eligible to receive a Grant under **Section 5** hereof, or (iii) such other date as may be specified by the Board.

2.17 "***Grantee***" means a person who receives or holds an Option or Restricted Stock under the Plan.

2.18 "***Incentive Stock Option***" means an "incentive stock option" within the meaning of Section 422 of the Code, or the corresponding provision of any subsequently enacted tax statute, as amended from time to time.

2.19 "***Nonqualified Stock Option***" means a stock option that is not an Incentive Stock Option.

2.20 "***Option***" means an option to purchase one or more shares of Stock pursuant to the Plan.

2.21 "***Option Price***" means the purchase price for each share of Stock subject to an Option.

2.22 "***Other Agreement***" shall have the meaning set forth in **Section 13** hereof.

2.23 "***Plan***" means this GlycoMimetics, Inc. 2003 Stock Incentive Plan.

2.24 "***Purchase Price***" means the purchase price for each share of Stock pursuant to a Grant of Restricted Stock.

2.25 "***Reporting Person***" means a person who is required to file reports under Section 16(a) of the Exchange Act.

2 26 "***Restricted Stock***" means shares of Stock, awarded to a Grantee pursuant to **Section 9** hereof, that are subject to restrictions and to a risk of forfeiture.

2.27 "***Securities Act***" means the Securities Act of 1933, as now in effect or as hereafter amended.

2.28 "***Service***" means service as an employee, officer, director or other Service Provider of the Company or an Affiliate. Unless otherwise stated in the applicable Award Agreement, a Grantee's change in position or duties shall not result in interrupted or terminated Service, so long as such Grantee continues to be an employee, officer, director or other Service Provider of the Company or an Affiliate. Subject to the preceding sentence, whether a termination of Service shall have occurred for purposes of the Plan shall be determined by the Board, which determination shall be final, binding and conclusive.

2.29 "***Service Provider***" means an employee, officer or director of the Company or an Affiliate, or a consultant or adviser currently providing services to the Company or an Affiliate.

2.30 "***Stock***" means the common stock, $.001 par value per share, of the Company.

2.31 "***Subsidiary***" means any "subsidiary corporation" of the Company within the meaning of Section 424(f) of the Code.

2.32 "***Ten-Percent Stockholder***" means an individual who owns more than ten percent (10%) of the total combined voting power of all classes of outstanding stock of the Company, its parent or any of its Subsidiaries. In determining stock ownership, the attribution rules of Section 424(d) of the Code shall be applied.

3. ADMINISTRATION OF THE PLAN

3.1 Board.

The Board shall have such powers and authorities related to the administration of the Plan as are consistent with the Company's certificate of incorporation and by-laws and applicable law. The Board shall have full power and authority to take all actions and to make all determinations required or provided for under the Plan, any Grant or any Award Agreement, and shall have full power and authority to take all such other actions and make all such other determinations not inconsistent with the specific terms and provisions of the Plan that the Board deems to be necessary or appropriate to the administration of the Plan, any Grant or any Award Agreement. All such actions and determinations shall be by the affirmative vote of a majority of the members of the Board present at a meeting or by unanimous consent of the Board executed in writing in accordance with the Company's certificate of incorporation and by-laws and applicable law The interpretation and construction by the Board of any provision of the Plan, any Grant or any Award Agreement shall be final, binding and conclusive. To the extent permitted by law, the Board may delegate its authority under the Plan to a member of the Board or an executive officer of the Company who is a member of the Board.

3.2 Committee.

The Board from time to time may delegate to one or more Committees such powers and authorities related to the administration and implementation of the Plan, as set forth in **Section 3.1** above and in other applicable provisions, as the Board shall determine, consistent with the certificate of incorporation and by-laws of the Company and applicable law. In the event that the

Plan, any Grant or any Award Agreement entered into hereunder provides for any action to be taken by or determination to be made by the Board, such action may be taken by or such determination may be made by the applicable Committee if the power and authority to do so has been delegated to the Committee by the Board as provided for in **Section 3.1**. Unless otherwise expressly determined by the Board, any such action or determination by the Committee shall be final, binding and conclusive. To the extent permitted by law, the Committee may delegate its authority under the Plan to a member of the Board or an executive officer of the Company.

3.3 Grants.

Subject to the other terms and conditions of the Plan, the Board shall have full and final authority to:

(i) designate Grantees,

(ii) determine the type or types of Grants to be made to a Grantee,

(iii) determine the number of shares of Stock to be subject to a Grant,

(iv) establish the terms and conditions of each Grant (including, but not limited to, the Option Price of any Option, the nature and duration of any restriction or condition (or provision for lapse thereof) relating to the vesting, exercise, transfer, or forfeiture of a Grant or the shares of Stock subject thereto, and any terms or conditions that may be necessary to qualify Options as Incentive Stock Options),

(v) prescribe the form of each Award Agreement evidencing a Grant, and

(vi) amend, modify, or supplement the terms of any outstanding Grant.

Such authority specifically includes the authority, in order to effectuate the purposes of the Plan but without amending the Plan, to modify Grants to eligible individuals who are foreign nationals or are individuals who are employed outside the United States to recognize differences in local law, tax policy, or custom. As a condition to any Grant, the Board shall have the right, at its discretion, to require Grantees to return to the Company Grants previously awarded under the Plan. Subject to the terms and conditions of the Plan, any such subsequent Grant shall be upon such terms and conditions as are specified by the Board at the time the new Grant is made. The Board shall have the right, in its discretion, to make Grants in substitution or exchange for any other grant under another plan of the Company, any Affiliate, or any business entity to be acquired by the Company or an Affiliate. The Company may retain the right in an Award Agreement to cause a forfeiture of the gain realized by a Grantee on account of actions taken by the Grantee in violation or breach of or in conflict with any non-competition agreement, any agreement prohibiting solicitation of employees or clients of the Company or any Affiliate thereof or any confidentiality obligation with respect to the Company or any Affiliate thereof or otherwise in competition with the Company or any Affiliate thereof, to the extent specified in such Award Agreement applicable to the Grantee. Furthermore, the Company may annul a Grant if the Grantee is an employee of the Company or an Affiliate thereof and is terminated for Cause as defined in the applicable Award Agreement or the Plan, as applicable.

3.4 Deferral Arrangement.

The Board may permit or require the deferral of any award payment into a deferred compensation arrangement, subject to such rules and procedures as it may establish, which may include provisions for the payment or crediting of interest or dividend equivalents, including converting such credits into deferred Stock equivalents and restricting deferrals to comply with hardship distribution rules affecting 401(k) plans.

3.5 No Liability.

No member of the Board or of the Committee shall be liable for any action or determination made in good faith with respect to the Plan or any Grant or Award Agreement.

4. STOCK SUBJECT TO THE PLAN

Subject to adjustment as provided in **Section 15** hereof and the limitation of the next paragraph relating to Restricted Stock, the number of shares of Stock available for issuance under the Plan shall be 1,520,000. Stock issued or to be issued under the Plan shall be authorized but unissued shares or, to the extent permitted by applicable law, issued shares that have been reacquired by the Company. If any shares covered by a Grant are not purchased or are forfeited, or if a Grant otherwise terminates without delivery of any Stock subject thereto, then the number of shares of Stock counted against the aggregate number of shares available under the Plan with respect to such Grant shall, to the extent of any such forfeiture or termination, again be available for making Grants under the Plan. If the exercise price of any Option granted under the Plan is satisfied by tendering shares of Stock to the Company (by either actual delivery or by attestation), only the number of shares of Stock issued net of the shares of Stock tendered shall be deemed delivered for purposes of determining the maximum number of shares of Stock available for delivery under the Plan.

5. GRANT ELIGIBILITY

5.1 Employees and Other Service Providers.

Grants (including Grants of Incentive Stock Options, subject to **Section 5.3**) may be made under the Plan to any employee, officer or director of, or other Service Provider providing services to, the Company or any Affiliate. To the extent required by applicable state law, Grants within certain states may be limited to employees and officers or employees, officers and directors.

5.2 Successive Grants.

An eligible person may receive more than one Grant, subject to such restrictions as are provided herein.

5.3 Limitations on Incentive Stock Options.

An Option shall constitute an Incentive Stock Option only (i) if the Grantee of such Option is an employee of the Company or any Subsidiary of the Company; (ii) to the extent specifically provided in the related Award Agreement; and (iii) to the extent that the aggregate Fair Market Value (determined at the time the Option is granted) of the shares of Stock with respect to which all Incentive Stock Options held by such Grantee become exercisable for the first time during any calendar year (under the Plan and all other plans of the Grantee's employer and its affiliates) does not exceed $100,000. This limitation shall be applied by taking Options into account in the order in which they were granted.

6. AWARD AGREEMENT

Each Grant pursuant to the Plan shall be evidenced by an Award Agreement, in such form or forms as the Board shall from time to time determine, which specifies the number of shares subject to the Grant and provides for adjustment in accordance with **Section 15**. Award Agreements granted from time to time or at the same time need not contain similar provisions but shall be consistent with the terms of the Plan. Each Award Agreement evidencing a Grant of Options shall specify whether such Options are intended to be Nonqualified Stock Options or Incentive Stock Options, and in the absence of such specification such options shall be deemed Nonqualified Stock Options.

7. TERMS AND CONDITIONS OF OPTIONS

7.1 Option Price.

The Option Price of each Option shall be fixed by the Board and stated in the Award Agreement evidencing such Option. In the case of an Incentive Stock Option the Option Price shall not be less than the Fair Market Value on the Grant Date of a share of Stock, provided, however, that in the event that a Grantee is a Ten-Percent Stockholder, the Option Price of an Incentive Stock Option granted to such Grantee shall be not less than 110 percent of the Fair Market Value of a share of Stock on the Grant Date. To the extent required by applicable law, in the case of a Nonqualified Stock Option, the Option Price shall be not less than 85 percent of the Fair Market Value on the Grant Date of a share of Stock, provided, however, that in the event that a Grantee is a Ten-Percent Stockholder, the Option Price shall be not less than 110 percent of the Fair Market Value of a share of Stock on the Grant Date. In no case shall the Option Price of any Option be less than the par value of a share of Stock.

7.2 Vesting.

Subject to **Sections 7.3** and **15.3** hereof, each Option granted under the Plan shall become exercisable at such times and under such conditions as shall be determined by the Board and stated in the Award Agreement For purposes of this **Section 7.2**, fractional numbers of shares of Stock subject to an Option shall be rounded down to the next nearest whole number. To the extent required by applicable law, each Option shall become exercisable no less rapidly than the

rate of twenty percent (20%) per year for each of the first five (5) years from the Grant Date based on continued Service. Subject to the preceding sentence, the Board may provide, for example, in the Award Agreement for (i) accelerated exercisability of the Option in the event the Grantee's Service terminates on account of death, Disability or another event, (ii) expiration of the Option prior to its term in the event of the termination of the Grantee's Service, (iii) immediate forfeiture of the Option in the event the Grantee's Service is terminated for Cause or (iv) unvested Options to be exercised subject to the Company's right of repurchase with respect to unvested shares of Stock.

7.3 Term.

Each Option granted under the Plan shall terminate, and all rights to purchase shares of Stock thereunder shall cease, upon the expiration of ten years from the Grant Date, or under such circumstances and on such date prior thereto as is set forth in the Plan or as may be fixed by the Board and stated in the Award Agreement relating to such Option; provided, however, that in the event that the Grantee is a Ten-Percent Stockholder, an Option granted to such Grantee that is intended to be an Incentive Stock Option shall not be exercisable after the expiration of five years from its Grant Date.

7.4 Exercise of Options on Termination of Service.

Each Award Agreement shall set forth the extent to which the Grantee shall have the right to exercise the Option following termination of the Grantee's Service. Such provisions shall be determined in the sole discretion of the Board, need not be uniform among all Options issued pursuant to the Plan, and may reflect distinctions based on the reasons for termination of Service. Notwithstanding the foregoing, to the extent required by applicable law, each Option shall provide that the Grantee shall have the right to exercise the vested portion of any Option held at termination for at least thirty (30) days following termination of Service with the Company for any reason (other than for Cause), and that the Grantee shall have the right to exercise the Option for at least six (6) months if the Grantee's Service terminates due to death or Disability.

7.5 Limitations on Exercise of Option.

Notwithstanding any other provision of the Plan, in no event may any Option be exercised, in whole or in part, prior to the date the Plan is approved by the shareholders of the Company, or after ten years following the Grant Date, or after the occurrence of an event referred to in **Section 15** hereof which results in termination of the Option.

7.6 Exercise Procedure.

An Option that is exercisable may be exercised by the Grantee's delivery to the Company of written notice of exercise on any business day, at the Company's principal office, on the form specified by the Company. Such notice shall specify the number of shares of Stock with respect to which the Option is being exercised and shall be accompanied by payment in full of the Option Price of the shares for which the Option is being exercised. The minimum number of

shares of Stock with respect to which an Option may be exercised, in whole or in part, at any time shall be the lesser of (i) 100 shares or such lesser number set forth in the applicable Award Agreement and (ii) the maximum number of shares available for purchase under the Option at the time of exercise. The Option Price shall be payable in a form described in **Section 10**.

7.7 Right of Holders of Options.

Unless otherwise stated in the applicable Award Agreement, an individual holding or exercising an Option shall have none of the rights of a shareholder (for example, the right to cash or dividend payments or distributions attributable to the subject shares of Stock or to direct the voting of shares of Stock) until the shares of Stock covered thereby are fully paid and issued to such individual.

7.8 Delivery of Stock Certificates.

Promptly after the exercise of an Option by a Grantee and the payment in full of the Option Price, such Grantee shall be entitled to the issuance of a stock certificate or certificates evidencing such Grantee's ownership of the shares of Stock purchased upon such exercise of the Option.

8. TRANSFERABILITY OF OPTIONS

8.1 Transferability of Options.

Except as provided in **Section 8.2**, during the lifetime of a Grantee, only the Grantee (or, in the event of legal incapacity or incompetency, the Grantee's guardian or legal representative) may exercise an Option. Except as provided in **Section 8.2**, no Option shall be assignable or transferable by the Grantee to whom it is granted, other than by will or the laws of descent and distribution.

8.2 Family Transfers.

If authorized in the applicable Award Agreement, a Grantee may transfer, not for value, all or part of an Option that is not an Incentive Stock Option to any Family Member For the purpose of this **Section 8.2**, a "not for value" transfer is a transfer which is (i) a gift, (ii) a transfer under a domestic relations order in settlement of marital property rights; or (iii) unless applicable law does not permit such transfers, a transfer to an entity in which more than fifty percent of the voting interests are owned by Family Members (or the Grantee) in exchange for an interest in that entity. Following a transfer under this **Section 8.2**, any such Option shall continue to be subject to the same terms and conditions as were applicable immediately prior to transfer, and shares of Stock acquired pursuant to the Option shall be subject to the same restrictions on transfer of shares as would have applied to the Grantee. Subsequent transfers of transferred Options are prohibited except to Family Members of the original Grantee in accordance with this **Section 8.2** or by will or the laws of descent and distribution. The events of termination of Service under an Option shall continue to be applied with respect to the original

Grantee, following which the Option shall be exercisable by the transferee only to the extent, and for the periods specified in the applicable Award Agreement, and the shares may be subject to repurchase by the Company or its assignee.

9. RESTRICTED STOCK

9.1 Grant of Restricted Stock.

The Board may from time to time grant Restricted Stock to persons eligible to receive Grants under **Section 5** hereof, subject to such restrictions, conditions and other terms as the Board may determine.

9.2 Restrictions.

At the time a Grant of Restricted Stock is made, the Board shall establish a restriction period applicable to such Restricted Stock. Each Grant of Restricted Stock may be subject to a different restriction period. The Board may, in its sole discretion, at the time a Grant of Restricted Stock is made, prescribe conditions that must be satisfied prior to the expiration of the restriction period, including the satisfaction of corporate or individual performance objectives or continued Service, in order that all or any portion of the Restricted Stock shall vest. To the extent required by applicable law, the vesting restrictions applicable to a Grant of Restricted Stock shall lapse no less rapidly than the rate of twenty percent (20%) per year for each of the first five (5) years from the Grant Date, based on continued Service.

The Board also may, in its sole discretion, shorten or terminate the restriction period or waive any of the conditions applicable to all or a portion of the Restricted Stock. The Restricted Stock may not be sold, transferred, assigned, pledged or otherwise encumbered or disposed of during the restriction period or prior to the satisfaction of any other conditions prescribed by the Board with respect to such Restricted Stock; *provided*, *however*, that if authorized in the applicable Award Agreement, the Grantee may transfer Restricted Stock to a Family Member in a “not for value” transfer, as such term is defined in **Section 8.2** hereof. In the case of a transfer to a Family Member, the events of termination of Service with regard to a Restricted Stock Award shall continue to be applied with respect to the original Grantee, following which the Restricted Stock will terminate in accordance with its terms, and the shares will be subject to repurchase by the Company or its assignee.

9.3 Restricted Stock Certificates.

The Company shall issue, in the name of each Grantee to whom Restricted Stock has been granted, stock certificates representing the total number of shares of Restricted Stock granted to the Grantee, as soon as reasonably practicable after the Grant Date. The Board may provide in an Award Agreement that either (i) the Secretary of the Company shall hold such certificates for the Grantee’s benefit until such time as the Restricted Stock is forfeited to the Company, or the restrictions lapse, or (ii) such certificates shall be delivered to the Grantee, provided, however, that such certificates shall bear a legend or legends that complies with the applicable securities laws and regulations and makes appropriate reference to the restrictions imposed under the Plan and the Award Agreement.

9.4 Rights of Holders of Restricted Stock.

Unless the Board otherwise provides in an Award Agreement, holders of Restricted Stock shall have the right to vote such Stock and the right to receive any dividends declared or paid with respect to such Stock. The Board may provide that any dividends paid on Restricted Stock must be reinvested in shares of Stock, which may or may not be subject to the same vesting conditions and restrictions applicable to such Restricted Stock. All distributions, if any, received by a Grantee with respect to Restricted Stock as a result of any stock split, stock dividend, combination of shares, or other similar transaction shall be subject to the restrictions applicable to the original Grant.

9.5 Termination of Service.

Unless otherwise provided by the Board in the applicable Award Agreement, upon the termination of a Grantee's Service with the Company or an Affiliate, any shares of Restricted Stock held by such Grantee that have not vested, or with respect to which all applicable restrictions and conditions have not lapsed, shall immediately be deemed forfeited. Upon forfeiture of Restricted Stock, the Grantee shall have no further rights with respect to such Grant, including but not limited to any right to vote Restricted Stock or any right to receive dividends with respect to shares of Restricted Stock.

9.6 Purchase and Delivery of Stock.

The Grantee shall be required to purchase the Restricted Stock from the Company at a Purchase Price equal to the greater of (i) the aggregate par value of the shares of Stock represented by such Restricted Stock or (ii) the Purchase Price, if any, specified in the Award Agreement relating to such Restricted Stock. The Purchase Price shall be payable in a form described in **Section 10** or, in the discretion of the Board, in consideration for past Services rendered to the Company or an Affiliate. To the extent required by applicable law, the Purchase Price of a share of Restricted Stock shall be not less than 85 percent of the Fair Market Value on the Grant Date of a share of Stock; *provided, however*, that in the event that the Grantee is a Ten-Percent Stockholder, the Purchase Price shall be not less than 100 percent of the Fair Market Value on the Grant Date of a share of Stock.

Upon the expiration or termination of the restriction period and the satisfaction of any other conditions prescribed by the Board, having properly paid the Purchase Price, the restrictions applicable to shares of Restricted Stock shall lapse, and, unless otherwise provided in the Award Agreement, a stock certificate for such shares shall be delivered, free of all such restrictions, to the Grantee or the Grantee's beneficiary or estate, as the case may be.

10. FORM OF PAYMENT

10.1 General Rule.

Payment of the Option Price for the shares purchased pursuant to the exercise of an Option or the Purchase Price for Restricted Stock shall be made in cash or in cash equivalents acceptable to the Company.

10.2 Surrender of Stock.

To the extent the Award Agreement so provides, payment of the Option Price for shares purchased pursuant to the exercise of an Option or the Purchase Price for Restricted Stock may be made all or in part through the tender to the Company of shares of Stock, which shares, if acquired from the Company, shall have been held for at least six months at the time of tender and which shall be valued, for purposes of determining the extent to which the Option Price or Purchase Price has been paid thereby, at their Fair Market Value on the date of exercise.

10.3 Cashless Exercise.

With respect to an Option only (and not with respect to Restricted Stock), to the extent the Award Agreement so provides and the shares of Stock have become publicly traded, payment of the Option Price for shares purchased pursuant to the exercise of an Option may be made all or in part by delivery (on a form acceptable to the Board) of an irrevocable direction to a licensed securities broker acceptable to the Company to sell shares of Stock and to deliver all or part of the sales proceeds to the Company in payment of the Option Price and any withholding taxes described in **Section 11**.

10.4 Promissory Note.

To the extent the Award Agreement so provides, payment of the Option Price for shares purchased pursuant to the exercise of an Option or the Purchase Price for Restricted Stock may be made all or in part with a full recourse promissory note executed by the Grantee. The interest rate and other terms and conditions of such note shall be determined by the Board. The Board may require that the Grantee pledge the Stock subject to the Grant for the purpose of securing payment of the note. In no event shall stock certificate(s) representing the Stock be released to the Grantee until such note is paid in full.

11. WITHHOLDING TAXES

The Company or any Affiliate, as the case may be, shall have the right to deduct from payments of any kind otherwise due to a Grantee any Federal, state, or local taxes of any kind required by law to be withheld with respect to the vesting of or other lapse of restrictions applicable to Restricted Stock or upon the issuance of any shares of Stock upon the exercise of an Option. At the time of such vesting, lapse, or exercise, the Grantee shall pay to the Company or Affiliate, as the case may be, any amount that the Company or Affiliate may reasonably

determine to be necessary to satisfy such withholding obligation. Subject to the prior approval of the Company or the Affiliate, which may be withheld by the Company or the Affiliate, as the case may be, in its sole discretion, the Grantee may elect to satisfy such obligations, in whole or in part, (i) by causing the Company or the Affiliate to withhold shares of Stock otherwise issuable to the Grantee or (ii) by delivering to the Company or the Affiliate shares of Stock already owned by the Grantee. The shares of Stock so delivered or withheld shall have an aggregate Fair Market Value equal to such withholding obligations. The Fair Market Value of the shares of Stock used to satisfy such withholding obligation shall be determined by the Company or the Affiliate as of the date that the amount of tax to be withheld is to be determined A Grantee who has made an election pursuant to this **Section 11** may satisfy his or her withholding obligation only with shares of Stock that are not subject to any repurchase, forfeiture, unfulfilled vesting, or other similar requirements.

12. RESTRICTIONS ON TRANSFER OF SHARES OF STOCK

12.1 Right of First Refusal.

Subject to **Section 12.4** below, a Grantee (or such other individual who is entitled to exercise an Option or otherwise acquire shares pursuant to a Grant under the terms of this Plan) shall not sell, pledge, assign, gift, transfer, or otherwise dispose of any shares of Stock acquired pursuant to a Grant to any person or entity without first offering such shares to the Company for purchase on the same terms and conditions as those offered to the proposed transferee. The Company may assign its right of first refusal under this **Section 12.1** in whole or in part, to (1) any holder of stock or other securities of the Company (a "Stockholder"), (2) any Affiliate or (3) any other person or entity that the Board determines has a sufficient relationship with or interest in the Company. The Company shall give reasonable written notice to the Grantee of any such assignment of its rights. The restrictions of this **Section 12.1** apply to any person to whom Stock that was originally acquired pursuant to a Grant is sold, pledged, assigned, bequeathed, gifted, transferred or otherwise disposed of, without regard to the number of such subsequent transferees or the manner in which they acquire the Stock, but the restrictions of this **Section 12.1** do not apply to a transfer of Stock that occurs as a result of the death of the Grantee or of any subsequent transferee (but shall apply to the executor, the administrator or personal representative, the estate, and the legatees, beneficiaries and assigns thereof). Except as otherwise provided in the Award Agreement for a Grant of Restricted Stock, the foregoing provisions shall not apply to Grants of Restricted Stock hereunder.

12.2 Repurchase and Other Rights.

Stock issued upon exercise of an Option or pursuant to the Grant of Restricted Stock may be subject to such right of repurchase or other transfer restrictions as the Board may determine, consistent with applicable law. Any such additional restriction shall be set forth in the Award Agreement.

12.3 Installment Payments.

12.3.1 General Rule.

In the case of any purchase of Stock or an Option under this **Section 12**, the Company or its permitted assignee may pay the Grantee, transferee of the Option or other registered owner of the Stock the purchase price in three or fewer annual installments. Interest shall be credited on the installments at the applicable federal rate (as determined for purposes of Section 1274 of the Code) in effect on the date on which the purchase is made. The Company or its permitted assignee shall pay at least one-third of the total purchase price each year, plus interest on the unpaid balance, with the first payment being made on or before the 60th day after the purchase.

12.3.2 Exception in the Case of Stock Repurchase Right.

If an Award Agreement authorizes, upon the Grantee's termination of Service, the repurchase of shares of Stock acquired by the Grantee pursuant to the exercise of an Option or under a Grant of Restricted Stock, to the extent required by applicable law, payment shall be made in cash or by cancellation of indebtedness within the later of 90 days from the date of termination of Service or 90 days from the date of exercise or purchase, as the case may be.

12.4 Publicly Traded Stock.

If the Stock is listed on an established national or regional stock exchange or is admitted to quotation on The Nasdaq Stock Market, Inc., or is publicly traded in an established securities market, the foregoing transfer restrictions of **Sections 12.1** and **12.2** shall terminate as of the first date that the Stock is so listed, quoted or publicly traded.

12.5 Legend.

In order to enforce the restrictions imposed upon shares of Stock under this Plan or as provided in an Award Agreement, the Board may cause a legend or legends to be placed on any certificate representing shares issued pursuant to this Plan that complies with the applicable securities laws and regulations and makes appropriate reference to the restrictions imposed under it.

13. PARACHUTE LIMITATIONS

Notwithstanding any other provision of this Plan or of any other agreement, contract, or understanding heretofore or hereafter entered into by a Grantee with the Company or any Affiliate, except an agreement, contract, or understanding hereafter entered into that expressly modifies or excludes application of this paragraph (an "Other Agreement"), and notwithstanding any formal or informal plan or other arrangement for the direct or indirect provision of compensation to the Grantee (including groups or classes of participants or beneficiaries of which the Grantee is a member), whether or not such compensation is deferred, is in cash, or is in the form of a benefit to or for the Grantee (a "Benefit Arrangement"), if the Grantee is a "disqualified individual," as defined in Section 280G(c) of the Code, any Options or Restricted

Stock held by that Grantee and any right to receive any payment or other benefit under this Plan shall not become exercisable or vested (i) to the extent that such right to exercise, vesting, payment, or benefit, taking into account all other rights, payments, or benefits to or for the Grantee under this Plan, all Other Agreements, and all Benefit Arrangements, would cause any payment or benefit to the Grantee under this Plan to be considered a "parachute payment" within the meaning of Section 280G(b)(2) of the Code as then in effect (a "Parachute Payment") and (ii) if, as a result of receiving a Parachute Payment, the aggregate after-tax amounts received by the Grantee from the Company under this Plan, all Other Agreements, and all Benefit Arrangements would be less than the maximum after-tax amount that could be received by the Grantee without causing any such payment or benefit to be considered a Parachute Payment. In the event that the receipt of any such right to exercise, vesting, payment, or benefit under this Plan, in conjunction with all other rights, payments, or benefits to or for the Grantee under any Other Agreement or any Benefit Arrangement would cause the Grantee to be considered to have received a Parachute Payment under this Plan that would have the effect of decreasing the after-tax amount received by the Grantee as described in clause (ii) of the preceding sentence, then the Grantee shall have the right, in the Grantee's sole discretion, to designate those rights, payments, or benefits under this Plan, any Other Agreements, and any Benefit Arrangements that should be reduced or eliminated so as to avoid having the payment or benefit to the Grantee under this Plan be deemed to be a Parachute Payment.

14. REQUIREMENTS OF LAW

14.1 General.

The Company shall not be required to sell or issue any shares of Stock under any Grant if the sale or issuance of such shares would constitute a violation by the Grantee, any other individual exercising a right emanating from such Grant, or the Company of any provision of any law or regulation of any governmental authority, including without limitation any federal or state securities laws or regulations. If at any time the Company shall determine, in its discretion, that the listing, registration or qualification of any shares subject to a Grant upon any securities exchange or under any governmental regulatory body is necessary or desirable as a condition of, or in connection with, the issuance or purchase of shares hereunder, no shares of Stock may be issued or sold to the Grantee or any other individual exercising an Option pursuant to such Grant unless such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Company, and any delay caused thereby shall in no way affect the date of termination of the Grant. Specifically, in connection with the Securities Act, upon the exercise of any right emanating from such Grant or the delivery of any shares of Restricted Stock, unless a registration statement under the Securities Act is in effect with respect to the shares of Stock covered by such Grant, the Company shall not be required to sell or issue such shares unless the Board has received evidence satisfactory to it that the Grantee or any other individual exercising an Option may acquire such shares pursuant to an exemption from registration under the Securities Act. Any determination in this connection by the Board shall be final, binding, and conclusive. The Company may, but shall in no event be obligated to, register any securities covered hereby pursuant to the Securities Act The Company shall not be obligated to take any affirmative action in order to cause the exercise of an Option or the issuance of shares of Stock pursuant to the Plan to comply with any law or regulation of any

governmental authority. As to any jurisdiction that expressly imposes the requirement that an Option shall not be exercisable until the shares of Stock covered by such Option are registered or are exempt from registration, the exercise of such Option (under circumstances in which the laws of such jurisdiction apply) shall be deemed conditioned upon the effectiveness of such registration or the availability of such an exemption.

14.2 Rule 16b-3.

During any time when the Company has a class of equity security registered under Section 12 of the Exchange Act, it is the intent of the Company that Grants pursuant to the Plan and the exercise of Options granted hereunder will qualify for the exemption provided by Rule 16b-3 under the Exchange Act. To the extent that any provision of the Plan or action by the Board does not comply with the requirements of Rule 16b-3, it shall be deemed inoperative to the extent permitted by law and deemed advisable by the Board, and shall not affect the validity of the Plan. In the event that Rule 16b-3 is revised or replaced, the Board may exercise its discretion to modify this Plan in any respect necessary to satisfy the requirements of, or to take advantage of any features of, the revised exemption or its replacement.

14.3 Financial Reports.

To the extent required by applicable law, not less often than annually, the Company shall furnish to Grantees summary financial information including a balance sheet regarding the Company's financial condition and results of operations, unless such Grantees have duties with the Company that assure them access to equivalent information. Such financial statements need not be audited.

15. EFFECT OF CHANGES IN CAPITALIZATION

15.1 Changes in Stock.

The number of shares for which Grants of Options and Restricted Stock may be made under the Plan shall be proportionately increased or decreased for any increase or decrease in the number of shares of Stock on account of any recapitalization, reclassification, stock split, reverse split, combination of shares, exchange of shares, stock dividend or other distribution payable in capital stock, or for any other increase or decrease in such shares effected without receipt of consideration by the Company occurring after the Effective Date (any such event hereafter referred to as a "Corporate Event"). In addition, subject to the exception set forth in the last sentence of **Section 15.4**, the number of shares for which Grants are outstanding shall be proportionately increased or decreased for any increase or decrease in the number of shares of Stock on account of any Corporate Event. Any such adjustment in outstanding Options shall not change the aggregate Option Price payable with respect to shares that are subject to the unexercised portion of an Option outstanding but shall include a corresponding proportionate adjustment in the Option Price per share. The conversion of any convertible securities of the Company shall not be treated as an increase in shares effected without receipt of consideration. In the event of any distribution to the Company's stockholders of securities of any other entity or other assets (other than dividends payable in cash or stock of the Company) without receipt of

consideration by the Company, the Company may, in such manner as the Company deems appropriate, adjust (i) the number and kind of shares subject to outstanding Awards and/or (ii) the exercise price of outstanding Options to reflect such distribution.

15.2 Reorganization in Which the Company Is the Surviving Entity and in Which No Change of Control Occurs.

Subject to the exception set forth in the last sentence of **Section 15.4**, if the Company shall be the surviving entity in any reorganization, merger, or consolidation of the Company with one or more other entities and in which no Change of Control occurs, any Grant theretofore made pursuant to the Plan shall pertain to and apply solely to the common stock shares to which a holder of the number of shares of Stock subject to such Grant would have been entitled immediately following such reorganization, merger, or consolidation, and in the case of Options, with a corresponding proportionate adjustment of the Option Price per share so that the aggregate Option Price thereafter shall be the same as the aggregate Option Price of the shares remaining subject to the Option immediately prior to such reorganization, merger, or consolidation. Subject to any contrary language in an Award Agreement evidencing a Grant of Restricted Stock, any restrictions applicable to such Restricted Stock shall apply as well to any replacement shares received by the Grantee as a result of the reorganization, merger or consolidation.

15.3 Reorganization, Sale of Assets or Sale of Stock Which Involves a Change of Control.

Subject to the exceptions set forth in the last sentence of Section **15.4**, the Board in its discretion may, at the time a grant of Restricted Stock or an Option is made, or at any time thereafter, provide that upon the occurrence of a Change of Control, one or more of the following actions shall be taken: (i) provide for the purchase of the Restricted Stock or the Option upon the holder's request for an amount of cash or other property that could have been received upon the exercise or realization of the Restricted Stock or the Option had the Restricted Stock or the Option been fully vested or currently exercisable or payable, as applicable; (ii) adjust the terms of the Restricted Stock or the Option in a manner determined by the Board in good faith to reflect the Change of Control; (iii) cause the Restricted Stock or the Option to be assumed, or new equivalent rights substituted therefore, by another entity; or (iv) make such other provision as the Board may consider equitable and in the best interests of the Company (including the termination of the Options immediately prior to the occurrence of a Change of Control provided, that Optionees are given a reasonable period of time to exercise the Options with respect to at least fifty percent (50%) of the shares subject to the Options, notwithstanding any limits on exercisability.

15.4 Adjustments.

Adjustments under **Section 15** related to shares of Stock or securities of the Company shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. No fractional shares or other securities shall be issued pursuant to any such adjustment, and any fractions resulting from any such adjustment shall be eliminated in each case by rounding downward to the nearest whole share. The Board may provide in the Award Agreements at the time of Grant, or any time thereafter with the consent of the Grantee, for different provisions to apply to a Grant in place of those described in **Sections 15.1, 15.2** and **15.3**.

15.5 No Limitations on Company.

The making of Grants pursuant to the Plan shall not affect or limit in any way the right or power of the Company to make adjustments, reclassifications, reorganizations, or changes of its capital or business structure or to merge, consolidate, dissolve, or liquidate, or to sell or transfer all or any part of its business or assets.

16. DURATION AND AMENDMENTS

16.1 Term of the Plan.

The Effective Date of this Plan is the date of its adoption by the Board, subject to the approval of the Plan by the Company's stockholders. In the event that the stockholders fail to approve the Plan within twelve (12) months after its adoption by the Board, any Grants already made shall be null and void, and no additional Grants shall be made after such date. The Plan shall terminate automatically ten (10) years after its adoption by the Board and may be terminated on any earlier date as next provided.

16.2 Amendment and Termination of the Plan.

The Board may, at any time and from time to time, amend, suspend, or terminate the Plan as to any shares of Stock as to which Grants have not been made. An amendment to the Plan shall be contingent on approval of the Company's stockholders only to the extent required by applicable law, regulations or rules. No Grants shall be made after the termination of the Plan. No amendment, suspension, or termination of the Plan shall, without the consent of the Grantee, alter or impair rights or obligations under any Grant theretofore awarded under the Plan.

17. GENERAL PROVISIONS

17.1 Disclaimer of Rights

No provision in the Plan or in any Grant or Award Agreement shall be construed to confer upon any individual the right to remain in the employ or service of the Company or any Affiliate, or to interfere in any way with any contractual or other right or authority of the Company either to increase or decrease the compensation or other payments to any individual at any time, or to terminate any employment or other relationship between any individual and the Company or any Affiliate. The obligation of the Company to pay any benefits pursuant to this Plan shall be interpreted as a contractual obligation to pay only those amounts described herein, in the manner and under the conditions prescribed herein. The Plan shall in no way be interpreted to require the Company to transfer any amounts to a third party trustee or otherwise hold any amounts in trust or escrow for payment to any participant or beneficiary under the terms of the Plan.

17.2 Nonexclusivity of the Plan

Neither the adoption of the Plan nor the submission of the Plan to the shareholders of the Company for approval shall be construed as creating any limitations upon the right and authority of the Board to adopt such other incentive compensation arrangements (which arrangements may be applicable either generally to a class or classes of individuals or specifically to a particular individual or particular individuals) as the Board in its discretion determines desirable, including, without limitation, the granting of stock options otherwise than under the Plan.

17.3 Captions

The use of captions in this Plan or any Award Agreement is for the convenience of reference only and shall not affect the meaning of any provision of the Plan or such Award Agreement.

17.4 Other Award Agreement Provisions

Each Grant awarded under the Plan may contain such other terms and conditions not inconsistent with the Plan as may be determined by the Board, in its sole discretion.

17.5 Number and Gender

With respect to words used in this Plan, the singular form shall include the plural form, the masculine gender shall include the feminine gender, etc., as the context requires.

17.6 Severability

If any provision of the Plan or any Award Agreement shall be determined to be illegal or unenforceable by any court of law in any jurisdiction, the remaining provisions hereof and thereof shall be severable and enforceable in accordance with their terms, and all provisions shall remain enforceable in any other jurisdiction.

17.7 Governing Law

The validity and construction of this Plan and the instruments evidencing the Grants awarded hereunder shall be governed by the laws of the State of Delaware other than any conflicts or choice of law rule or principle that might otherwise refer construction or interpretation of this Plan and the instruments evidencing the Grants awarded hereunder to the substantive laws of any other jurisdiction.

18. EXECUTION

To record adoption of the Plan by the Board on May 19, 2003, and approval of the Plan by the stockholders on May 20, 2003, the Company has caused its authorized officer to execute the Plan.

GLYCOMIMETICS, INC.

/s/ Rachel K. King

By: Rachel K. King
Title: President and Chief Executive Officer

FIRST AMENDMENT TO THE

GLYCOMIMETICS, INC. 2003 STOCK INCENTIVE PLAN

THIS FIRST AMENDMENT (the "**First Amendment**") to the 2003 Stock Incentive Plan (the "**Plan**") of GlycoMimetics, Inc., a Delaware corporation (the "**Corporation**"), is hereby adopted effective as of June 19, 2006, as set forth below:

WHEREAS, the Board of Directors of the Corporation (the "**Board**") desires to modify and amend the Plan in accordance with the terms and conditions of this First Amendment;

WHEREAS, Section 16.2 of the Plan provides that the Plan generally may be amended by the Board, Section 5A(7) of the Amended and Restated Certificate of Incorporation of the Corporation provides that any increase in the number of shares available for issuance under the Plan in excess of 1,520,000 shares shall require the vote or prior written consent of the holders of not less than sixty-one percent of the outstanding shares of Series A Convertible Preferred Stock of the Corporation, and Section 422 of the Internal Revenue Code of 1986, as amended, and the regulations thereunder require the approval of such increase in shares available under the Plan by the holders of a majority of the outstanding voting stock of the Corporation;

WHEREAS, the Board has determined that it is in the best interests of the Corporation to increase the number of shares of the Corporation's common stock, par value $0.01 (the "**Common Stock**"), authorized for issuance under the Plan from 1,520,000 to 4,714,528 shares; and

WHEREAS, the Board approved such increase in the number of shares of Common Stock available for issuance under the Plan at a meeting of the Board held on June 19, 2006 and the holders of a majority of the outstanding shares of Series A Convertible Preferred Stock of the Corporation and the holders of a majority of the outstanding voting stock of the Corporation approved such increase by joint written consent on June 19, 2006.

NOW, THEREFORE, in consideration of the foregoing:

1. All capitalized terms used herein shall have the meanings assigned to them in the Plan unless expressly defined otherwise in this First Amendment.

2. Except as otherwise specifically provided herein, all terms and conditions of the Plan shall apply to the interpretation and enforcement of this First Amendment as if explicitly set forth herein.

3. The first sentence of Section 4 of the Plan is hereby amended by replacing the figure "1,520,000" with the figure "4,714,528."

4. Except as expressly amended hereby, the Plan shall remain in full force and effect. Any references to the Plan in any documents shall refer to the Plan as amended hereby.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the Corporation has executed this First Amendment as of the date first set forth above.

CORPORATION:

GlycoMimetics, Inc., a Delaware corporation

By: /s/ Rachel K. King
Name: Rachel K. King
Its: CEO

SECOND AMENDMENT TO THE

GLYCOMIMETICS, INC. 2003 STOCK INCENTIVE PLAN

THIS SECOND AMENDMENT (the "**Second Amendment**") to the 2003 Stock Incentive Plan, as amended (the "**Plan**"), of GlycoMimetics, Inc., a Delaware corporation (the "**Corporation**"), is hereby adopted effective as of October 20, 2009, as set forth below:

WHEREAS, the Board of Directors of the Corporation (the "**Board**") desires to modify and amend the Plan in accordance with the terms and conditions of this Second Amendment;

WHEREAS, Section 16.2 of the Plan provides that the Plan generally may be amended by the Board and Section 422 of the Internal Revenue Code of 1986, as amended, and the regulations thereunder require the approval of such increase in shares available under the Plan by the holders of a majority of the outstanding voting stock of the Corporation;

WHEREAS, the Board has determined that it is in the best interests of the Corporation to increase the number of shares of the Corporation's common stock, par value $0.01 (the "**Common Stock**"), authorized for issuance under the Plan to 4,829,003 shares; and

WHEREAS, the Board approved such increase in the number of shares of Common Stock available for issuance under the Plan by unanimous written consent dated October 20, 2009, and the holders of a majority of the outstanding capital stock of the Corporation and the holders of a majority of the outstanding voting stock of the Corporation approved such increase by written consent on October 20, 2009.

NOW, THEREFORE, in consideration of the foregoing:

1. All capitalized terms used herein shall have the meanings assigned to them in the Plan unless expressly defined otherwise in this Second Amendment.

2. Except as otherwise specifically provided herein, all terms and conditions of the Plan shall apply to the interpretation and enforcement of this Second Amendment as if explicitly set forth herein.

3. The first sentence of Section 4 of the Plan is hereby amended by replacing the figure "4,714,528" with "4,829,003."

4. Except as expressly amended hereby, the Plan shall remain in full force and effect. Any references to the Plan in any documents shall refer to the Plan as amended hereby.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the Corporation has executed this Second Amendment as of the date first set forth above.

CORPORATION:

GlycoMimetics, Inc., a Delaware corporation

By: /s/ Rachel K. King
Name: Rachel K. King
Its: President

SECOND AMENDMENT TO THE 2003 STOCK INCENTIVE PLAN

THIRD AMENDMENT TO THE

GLYCOMIMETICS, INC. 2003 STOCK INCENTIVE PLAN

THIS THIRD AMENDMENT (the "**Third Amendment**") to the 2003 Stock Incentive Plan, as amended (the "**Plan**"), of GlycoMimetics, Inc., a Delaware corporation (the "**Corporation**"), is hereby adopted effective as of March 28, 2012, as set forth below:

WHEREAS, the Board of Directors of the Corporation (the "**Board**") desires to modify and amend the Plan in accordance with the terms and conditions of this Third Amendment;

WHEREAS, Section 16.2 of the Plan provides that the Plan generally may be amended by the Board and Section 422 of the Internal Revenue Code of 1986, as amended, and the regulations thereunder require the approval of such increase in shares available under the Plan by the holders of a majority of the outstanding voting stock of the Corporation;

WHEREAS, the Board has determined that it is in the best interests of the Corporation to increase the number of shares of the Corporation's common stock, par value $0.01 (the "**Common Stock**"), authorized for issuance under the Plan to 5,029,003 shares; and

WHEREAS, the Board approved such increase in the number of shares of Common Stock available for issuance under the Plan by unanimous written consent dated March 28, 2012, and the holders of a majority of the outstanding capital stock of the Corporation and the holders of a majority of the outstanding voting stock of the Corporation approved such increase by written consent on March 28, 2012.

NOW, THEREFORE, in consideration of the foregoing:

1. All capitalized terms used herein shall have the meanings assigned to them in the Plan unless expressly defined otherwise in this Third Amendment.

2. Except as otherwise specifically provided herein, all terms and conditions of the Plan shall apply to the interpretation and enforcement of this Third Amendment as if explicitly set forth herein.

3. The first sentence of Section 4 of the Plan is hereby amended by replacing the figure "4,829,003" with "5,029,003."

4. Except as expressly amended hereby, the Plan shall remain in full force and effect. Any references to the Plan in any documents shall refer to the Plan as amended hereby.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the Corporation has executed this Third Amendment as of the date first set forth above.

CORPORATION:

GlycoMimetics, Inc., a Delaware corporation

By: /s/ Rachel K. King
Name: Rachel K. King
Its: Chief Executive Officer

Exhibit 10.9

Option No.:

GLYCOMIMETICS, INC.
2003 STOCK INCENTIVE PLAN

INCENTIVE STOCK OPTION AGREEMENT

GlycoMimetics, Inc., a Delaware corporation (the "Company"), hereby grants an option to purchase shares of its common stock, $.001 par value, (the "Stock") to the optionee named below. The terms and conditions of the option are set forth in this cover sheet, in the attachment and in the Company's 2003 Stock Incentive Plan (the "Plan").

Grant Date: , 200

Name of Optionee:

Optionee's Social Security Number: - -

Number of Shares Covered by Option:

Option Price per Share: $. **(At least 100% of Fair Market Value)**

Vesting Start Date: ,

By signing this cover sheet, you agree to all of the terms and conditions described in the attached Agreement and in the Plan, a copy of which is also attached. You acknowledge that you have carefully reviewed the Plan, and agree that the Plan will control in the event any provision of this Agreement should appear to be inconsistent.

Optionee: _____
(Signature)

Company: _____
(Signature)

Title: _____

Attachment

This is not a stock certificate or a negotiable instrument

GLYCOMIMETICS, INC.
2003 STOCK INCENTIVE PLAN

INCENTIVE STOCK OPTION AGREEMENT

Incentive Stock Option

This option is intended to be an incentive stock option under Section 422 of the Internal Revenue Code and will be interpreted accordingly. If you cease to be an employee of the Company, its parent or a subsidiary ("Employee") but continue to provide Service, this option will be deemed a nonstatutory stock option three months after you cease to be an Employee. In addition, to the extent that all or part of this option exceeds the $100,000 rule of section 422(d) of the Internal Revenue Code, this option or the lesser excess part will be deemed to be a nonstatutory stock option.

Vesting

This option is only exercisable before it expires and then only with respect to the vested portion of the option. Subject to the preceding sentence, you may exercise this option, in whole or in part, to purchase a whole number of vested shares not less than 100 shares, unless the number of shares purchased is the total number available for purchase under the option, by following the procedures set forth in the Plan and below in this Agreement.

Your right to purchase shares of Stock under this option vests as to one-fourth (1/4) of the total number of shares covered by this option, as shown on the cover sheet (the "Option Shares"), on the one-year anniversary of the Vesting Start Date ("Anniversary Date"), provided you then continue in Service. Thereafter, for each such vesting date that you remain in Service, the number of shares of Stock which you may purchase under this option shall vest at the rate of one forty-eighth ($1/48^{th}$) of the Option Shares per month as of the first day of each month following the month of the Anniversary Date. The resulting aggregate number of vested shares will be rounded to the nearest whole number, and you cannot vest in more than the number of shares covered by this option.

Subject to Section 7.3 of the Plan, the Option shall remain exercisable until the earlier of: (i) the expiration date or (ii) the expiration of a ninety (90) day period following the date of your involuntary termination. The Board, in its sole discretion, will determine the date of a Change of Control.

Term

Your option will expire in any event at the close of business at Company headquarters on the day before the 10th anniversary of the Grant Date, as shown on the cover sheet. Your option will expire earlier if your Service terminates, as described below.

Regular Termination	If your Service terminates for any reason, other than death, Disability or Cause, then your option will expire at the close of business at Company headquarters on the 60th day after your termination date.
Termination for Cause	If your Service is terminated for Cause, then you shall immediately forfeit all rights to your option and the option shall immediately expire.
Death	If your Service terminates because of your death, then your option will expire at the close of business at Company headquarters on the date twelve (12) months after the date of death. During that twelve month period, your estate or heirs may exercise the vested portion of your option. In addition, if you die during the 60-day period described in connection with a regular termination (i.e., a termination of your Service not on account of your death, Disability or Cause), and a vested portion of your option has not yet been exercised, then your option will instead expire on the date twelve (12) months after your termination date. In such a case, during the period following your death up to the date twelve (12) months after your termination date, your estate or heirs may exercise the vested portion of your option.
Disability	If your Service terminates because of your Disability, then your option will expire at the close of business at Company headquarters on the date twelve (12) months after your termination date.
Leaves of Absence	For purposes of this option, your Service does not terminate when you go on a *bona fide* employee leave of absence that was approved by the Company in writing, if the terms of the leave provide for continued Service crediting, or when continued Service crediting is required by applicable law. However, your Service will be treated as terminating 90 days after you went on employee leave, unless your right to return to active work is guaranteed by law or by a contract. Your Service terminates in any event when the approved leave ends unless you immediately return to active employee work. The Company determines, in its sole discretion, which leaves count for this purpose, and when your Service terminates for all purposes under the Plan.
Notice of Exercise	When you wish to exercise this option, you must notify the Company by filing the proper “Notice of Exercise” form at the address given on the form. Your notice must specify how many shares you wish to purchase (in a parcel of at least 100 shares

generally). Your notice must also specify how your shares of Stock should be registered (in your name only or in your and your spouse's names as joint tenants with right of survivorship). The notice will be effective when it is received by the Company.

If someone else wants to exercise this option after your death, that person must prove to the Company's satisfaction that he or she is entitled to do so.

Form of Payment

When you submit your notice of exercise, you must include payment of the option price for the shares you are purchasing. Payment may be made in one (or a combination) of the following forms:

- Cash, your personal check, a cashier's check, a money order or another cash equivalent acceptable to the Company.
- Shares of Stock which have already been owned by you for more than six months and which are surrendered to the Company. The value of the shares, determined as of the effective date of the option exercise, will be applied to the option price.
- To the extent a public market for the Stock exists as determined by the Company, by delivery (on a form prescribed by the Company) of an irrevocable direction to a licensed securities broker acceptable to the Company to sell Stock and to deliver all or part of the sale proceeds to the Company in payment of the aggregate option price and any withholding taxes.

Withholding Taxes

You will not be allowed to exercise this option unless you make acceptable arrangements to pay any withholding or other taxes that may be due as a result of the option exercise or sale of Stock acquired under this option. In the event that the Company determines that any federal, state, local or foreign tax or withholding payment is required relating to the exercise or sale of shares arising from this grant, the Company shall have the right to require such payments from you, or withhold such amounts from other payments due to you from the Company or any Affiliate.

Transfer of Option

During your lifetime, only you (or, in the event of your legal incapacity or incompetency, your guardian or legal representative) may exercise the option. You cannot transfer or assign this option. For instance, you may not sell this option or use it as security for a loan. If you attempt to do any of these things, this option will immediately become invalid. You may, however, dispose of this option in your will or it may be transferred upon your death by the laws of descent and distribution.

Regardless of any marital property settlement agreement, the Company is not obligated to honor a notice of exercise from your spouse, nor is the Company obligated to recognize your spouse's interest in your option in any other way.

Market Stand-off Agreement

In connection with any underwritten public offering by the Company of its equity securities pursuant to an effective registration statement filed under the Securities Act, including the Company's initial public offering, you agree not to sell, make any short sale of, loan, hypothecate, pledge, grant any option for the purchase of, or otherwise dispose or transfer for value or agree to engage in any of the foregoing transactions with respect to any shares of Stock without the prior written consent of the Company or its underwriters, for such period of time after the effective date of such registration statement as may be requested by the Company or the underwriters (not to exceed 180 days in length).

Investment Representation

If the sale of Stock under the Plan is not registered under the Securities Act, but an exemption is available which requires an investment or other representation, you shall represent and agree at the time of exercise that the Stock being acquired upon exercise of this option is being acquired for investment, and not with a view to the sale or distribution thereof, and shall make such other representations as are deemed necessary or appropriate by the Company and its counsel.

The Company's Right of First Refusal

In the event that you propose to sell, pledge or otherwise transfer to a third party any Stock acquired under this Agreement, or any interest in such Stock, the Company shall have the "Right of First Refusal" with respect to all (and not less than all) of such shares of Stock. If you desire to transfer Stock acquired under this Agreement, you must give a written "Transfer Notice" to the Company describing fully the proposed transfer, including the number of shares proposed to be transferred, the proposed transfer price and the name and address of the proposed transferee.

The Transfer Notice shall be signed both by you and by the proposed new transferee and must constitute a binding commitment of both parties to the transfer of the shares. The Company shall have the right to purchase all, and not less than all, of the shares of Stock on the terms of the proposal described in the Transfer Notice (subject, however, to any change in such terms permitted in the next paragraph) by delivery of a notice of exercise of the Right of First Refusal within thirty (30) days after the date when the Transfer Notice was received by the Company.

If the Company fails to exercise its Right of First Refusal within thirty (30) days after the date when it received the Transfer Notice, you may, not later than ninety (90) days following receipt of the Transfer Notice by the Company, conclude a transfer of the Stock subject to the Transfer Notice on the terms and conditions described in the Transfer Notice. Any proposed transfer on terms and conditions different from those described in the Transfer Notice, as well as any subsequent proposed transfer by you, shall again be subject to the Right of First Refusal and shall require compliance with the procedure described in the paragraph above. If the Company exercises its Right of First Refusal, the parties shall consummate the sale of the Stock on the terms set forth in the Transfer Notice within 60 days after the date when the Company received the Transfer Notice (or within such longer period as may have been specified in the Transfer Notice); provided, however, that in the event the Transfer Notice provided that payment for the Stock was to be made in a form other than lawful money paid at the time of transfer, the Company shall have the option of paying for the Stock with lawful money equal to the present value of the consideration described in the Transfer Notice.

In the case of any purchase of Stock under this Right of First Refusal, at the option of the Company, the Company may pay you the purchase price in three or fewer annual installments. Interest shall be credited on the installments at the applicable federal rate (as determined for purposes of Section 1274 of the Code) in effect on the date on which the purchase is made. The Company shall pay at least one-third of the total purchase price each year, plus interest on the unpaid balance, with the first payment being made on or before the 60th day after the purchase.

The Company's rights under this subsection shall be freely assignable, in whole or in part, shall inure to the benefit of its successors and assigns and shall be binding upon any transferee of the shares of Stock.

The Company's Right of First Refusal shall terminate in the event that the Stock is listed on an established national or regional stock exchange, is admitted for quotation on The Nasdaq Stock Market, Inc., or is publicly traded in an established securities market.

Right to Repurchase

Following termination of your Service for any reason, the Company shall have the right to purchase all of those shares of Stock that you have or will acquire under this option. If the Company exercises its right to purchase the shares, the Company will notify you of its

intention to purchase such shares, and will consummate the purchase within one year (or 90 days to the extent required by applicable law) of your termination of Service or, in the case of Stock acquired after your termination of Service, within one year (or 90 days to the extent required by applicable law) of the date of exercise.

The purchase price shall be the Fair Market Value of the shares on the date of your termination of Service if the Company exercises its right to purchase such shares within 90 days of your termination of Service or exercises its right within 90 days of the date of your exercise of the option following termination of Service, otherwise the purchase price shall be the Fair Market Value of the shares on the date the Company gives you notice of its intent to exercise its right to purchase the shares.

The Company's rights of repurchase shall terminate in the event that the Stock is listed on an established national or regional stock exchange, is admitted for quotation on The Nasdaq Stock Market, Inc., or is publicly traded in an established securities market.

Retention Rights

Neither your option nor this Agreement give you the right to be retained by the Company (or any Parent, Subsidiaries or Affiliates) in any capacity. The Company (and any Parent, Subsidiaries or Affiliates) reserve the right to terminate your Service at any time and for any reason.

Shareholder Rights

You, or your estate or heirs, have no rights as a shareholder of the Company until a certificate for your option's shares has been issued (or an appropriate book entry has been made). No adjustments are made for dividends or other rights if the applicable record date occurs before your stock certificate is issued (or an appropriate book entry has been made), except as described in the Plan.

Forfeiture of Rights

If you should take actions in competition with the Company, the Company shall have the right to cause a forfeiture of your rights, including, but not limited to, the right to cause: (i) a forfeiture of any outstanding option, and (ii) with respect to the period commencing twelve (12) months prior to your termination of Service with the Company and ending twelve (12) months following such termination of Service (A) a forfeiture of any gain recognized by you upon the exercise of an option or (B) a forfeiture of any Stock acquired by you upon the exercise of an option (but the Company will pay you the option price without interest). Unless otherwise specified in an employment or other agreement between the Company and you, you take actions in competition with the Company if you directly or indirectly, own, manage,

operate, join or control, or participate in the ownership, management, operation or control of, or are a proprietor, director, officer, stockholder, member, partner or an employee or agent of. or a consultant to any business, firm, corporation, partnership or other entity which competes with any business in which the Company or any of its Affiliates is engaged during your employment or other relationship with the Company or its Affiliates or at the time of your termination of Service. Under the prior sentence, ownership of less than 1% of the securities of a public company shall not be treated as an action in competition with the Company.

Adjustments In the event of a stock split, a stock dividend or a similar change in the Stock, the number of shares covered by this option and the option price per share shall be adjusted (and rounded down to the nearest whole number) if required pursuant to the Plan. Your option shall be subject to the terms of the agreement of merger, liquidation or reorganization in the event the Company is subject to such corporate activity.

Legends All certificates representing the Stock issued upon exercise of this option shall, where applicable, have endorsed thereon the following legends:

“THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND OPTIONS TO PURCHASE SUCH SHARES SET FORTH IN AN AGREEMENT BETWEEN THE COMPANY AND THE REGISTERED HOLDER, OR HIS OR HER PREDECESSOR IN INTEREST. A COPY OF SUCH AGREEMENT IS ON FILE AT THE PRINCIPAL OFFICE OF THE COMPANY AND WILL BE FURNISHED UPON WRITTEN REQUEST TO THE SECRETARY OF THE COMPANY BY THE HOLDER OF RECORD OF THE SHARES REPRESENTED BY THIS CERTIFICATE.”

“THE SHARES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED OR QUALIFIED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION, AND MAY NOT BE SOLD, PLEDGED, OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION OR QUALIFICATION THEREOF UNDER SUCH ACT AND SUCH APPLICABLE STATE OR OTHER JURISDICTION’S SECURITIES LAWS OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY AND ITS COUNSEL, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED.”

Applicable Law	This Agreement will be interpreted and enforced under the laws of the State of Delaware, other than any conflicts or choice of law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction.
The Plan	The text of the Plan is incorporated in this Agreement by reference Certain capitalized terms used in this Agreement are defined in the Plan, and have the meaning set forth in the Plan. This Agreement and the Plan constitute the entire understanding between you and the Company regarding this option. Any prior agreements, commitments or negotiations concerning this option are superseded.
Other Agreements	You agree, as a condition of the grant of this option, that in connection with the exercise of the option, you will execute such document(s) as necessary to become a party to any shareholder agreement or voting trust as the Company may require.
Certain Dispositions	If you sell or otherwise dispose of Stock acquired pursuant to the exercise of this option following termination of the Company's Right of First Refusal and sooner than the one year anniversary of the date you acquired the Stock, then you agree to notify the Company in writing of the date of sale or disposition, the number of share of Stock sold or disposed of and the sale price per share within 30 days of such sale or disposition.

By signing the cover sheet of this Agreement, you agree to all of the terms and conditions described above and in the Plan.

Exhibit 10.10

Option No.:

GLYCOMIMETICS, INC
2003 STOCK INCENTIVE PLAN

NONQUALIFIED STOCK OPTION AGREEMENT

GlycoMimetics, Inc., a Delaware corporation (the "Company"), hereby grants an option to purchase shares of its common stock, $.001 par value, (the "Stock") to the optionee named below. The terms and conditions of the option are set forth in this cover sheet, in the attachment and in the Company's 2003 Stock Incentive Plan (the "Plan").

Grant Date: , 200

Name of Optionee:

Optionee's Social Security Number: - -

Number of Shares Covered by Option:

Option Price per Share: $.

Vesting Start Date: , 20

By signing this cover sheet, you agree to all of the terms and conditions described in the attached Agreement and in the Plan, a copy of which is also attached. You acknowledge that you have carefully reviewed the Plan, and agree that the Plan will control in the event any provision of this Agreement should appear to be inconsistent.

Optionee: _____
(Signature)

Company: _____
(Signature)

Title: _____

Attachment

This is not a stock certificate or a negotiable instrument

GLYCOMIMETICS, INC.
2003 STOCK INCENTIVE PLAN

NONQUALIFIED STOCK OPTION AGREEMENT

Nonqualified Stock Option

This option is not intended to be an incentive stock option under Section 422 of the Internal Revenue Code and will be interpreted accordingly.

Vesting

This option is only exercisable before it expires and then only with respect to the vested portion of the option. Subject to the preceding sentence, you may exercise this option, in whole or in part, to purchase a whole number of vested shares not less than 100 shares, unless the number of shares purchased is the total number available for purchase under the option, by following the procedures set forth in the Plan and below in this Agreement.

Your right to purchase shares of Stock under this option vests as to one-fourth (1/4) of the total number of shares covered by this option, as shown on the cover sheet (the "Option Shares"), on the one-year anniversary of the Vesting Start Date ("Anniversary Date"), provided you then continue in Service. Thereafter, for each such vesting date that you remain in Service, the number of shares of Stock which you may purchase under this option shall vest at the rate of one-forty eighth (1/48) of the Option Shares per month as of the first day of each month following the month of the Anniversary Date. The resulting aggregate number of vested shares will be rounded to the nearest whole number, and you cannot vest in more than the number of shares covered by this option.

Subject to Section 7.3 of the Plan, the Option shall remain exercisable until the earlier of: (i) the expiration date or (ii) the expiration of a ninety (90) day period following the date of your involuntary termination. The Board, in its sole discretion, will determine the date of a Change of Control.

No additional shares of Stock will vest after your Service has terminated for any reason other those enumerated above.

Term

Your option will expire in any event at the close of business at Company headquarters on the day before the 10th anniversary of the Grant Date, as shown on the cover sheet. Your option will expire earlier if your Service terminates, as described below.

Regular Termination

If your Service terminates for any reason, other than death, Disability or Cause, then your option will expire at the close of business at Company headquarters on the 60th day after your termination date.

Termination for Cause	If your Service is terminated for Cause, then you shall immediately forfeit all rights to your option and the option shall immediately expire.
Death	If your Service terminates because of your death, then your option will expire at the close of business at Company headquarters on the date twelve (12) months after the date of death. During that twelve month period, your estate or heirs may exercise the vested portion of your option. In addition, if you die during the 60-day period described in connection with a regular termination (i.e., a termination of your Service not on account of your death, Disability or Cause), and a vested portion of your option has not yet been exercised, then your option will instead expire on the date twelve (12) months after your termination date. In such a case, during the period following your death up to the date twelve (12) months after your termination date, your estate or heirs may exercise the vested portion of your option.
Disability	If your Service terminates because of your Disability, then your option will expire at the close of business at Company headquarters on the date twelve (12) months after your termination date.
Leaves of Absence	For purposes of this option, your Service does not terminate when you go on a *bona fide* employee leave of absence that was approved by the Company in writing, if the terms of the leave provide for continued Service crediting, or when continued Service crediting is required by applicable law. However, your Service will be treated as terminating 90 days after you went on employee leave, unless your right to return to active work is guaranteed by law or by a contract. Your Service terminates in any event when the approved leave ends unless you immediately return to active employee work. The Company determines, in its sole discretion, which leaves count for this purpose, and when your Service terminates for all purposes under the Plan.
Notice of Exercise	When you wish to exercise this option, you must notify the Company by filing the proper “Notice of Exercise” form at the address given on the form. Your notice must specify how many shares you wish to purchase (in a parcel of at least 100 shares generally). Your notice must also specify how your shares of Stock should be registered (in your name only or in your and your spouse’s names as joint tenants with right of survivorship). The notice will be effective when it is received by the Company.

If someone else wants to exercise this option after your death, that person must prove to the Company's satisfaction that he or she is entitled to do so.

Form of Payment

When you submit your notice of exercise, you must include payment of the option price for the shares you are purchasing. Payment may be made in one (or a combination) of the following forms:

- Cash, your personal check, a cashier's check, a money order or another cash equivalent acceptable to the Company.
- Shares of Stock which have already been owned by you for more than six months and which are surrendered to the Company. The value of the shares, determined as of the effective date of the option exercise, will be applied to the option price.
- To the extent a public market for the Stock exists as determined by the Company, by delivery (on a form prescribed by the Company) of an irrevocable direction to a licensed securities broker acceptable to the Company to sell Stock and to deliver all or part of the sale proceeds to the Company in payment of the aggregate option price and any withholding taxes.

Withholding Taxes

You will not be allowed to exercise this option unless you make acceptable arrangements to pay any withholding or other taxes that may be due as a result of the option exercise or sale of Stock acquired under this option. In the event that the Company determines that any federal, state, local or foreign tax or withholding payment is required relating to the exercise or sale of shares arising from this grant, the Company shall have the right to require such payments from you, or withhold such amounts from other payments due to you from the Company or any Affiliate.

Transfer of Option

During your lifetime, only you (or, in the event of your legal incapacity or incompetency, your guardian or legal representative) may exercise the option. You cannot transfer or assign this option. For instance, you may not sell this option or use it as security for a loan. If you attempt to do any of these things, this option will immediately become invalid. You may, however, dispose of this option in your will or it may be transferred upon your death by the laws of descent and distribution.

Regardless of any marital property settlement agreement, the Company is not obligated to honor a notice of exercise from your spouse, nor is the Company obligated to recognize your spouse's interest in your option in any other way.

Market Stand-off Agreement

In connection with any underwritten public offering by the Company of its equity securities pursuant to an effective registration statement filed under the Securities Act, including the Company's initial public offering, you agree not to sell, make any short sale of, loan, hypothecate, pledge, grant any option for the purchase of, or otherwise dispose or transfer for value or agree to engage in any of the foregoing transactions with respect to any shares of Stock without the prior written consent of the Company or its underwriters, for such period of time after the effective date of such registration statement as may be requested by the Company or the underwriters (not to exceed 180 days in length).

Investment Representation

If the sale of Stock under the Plan is not registered under the Securities Act, but an exemption is available which requires an investment or other representation, you shall represent and agree at the time of exercise that the Stock being acquired upon exercise of this option is being acquired for investment, and not with a view to the sale or distribution thereof, and shall make such other representations as are deemed necessary or appropriate by the Company and its counsel.

The Company's Right of First Refusal

In the event that you propose to sell, pledge or otherwise transfer to a third party any Stock acquired under this Agreement, or any interest in such Stock, the Company shall have the "Right of First Refusal" with respect to all (and not less than all) of such shares of Stock. If you desire to transfer Stock acquired under this Agreement, you must give a written "Transfer Notice" to the Company describing fully the proposed transfer, including the number of shares proposed to be transferred, the proposed transfer price and the name and address of the proposed transferee.

The Transfer Notice shall be signed both by you and by the proposed new transferee and must constitute a binding commitment of both parties to the transfer of the shares. The Company shall have the right to purchase all, and not less than all, of the shares of Stock on the terms of the proposal described in the Transfer Notice (subject, however, to any change in such terms permitted in the next paragraph) by delivery of a notice of exercise of the Right of First Refusal within thirty (30) days after the date when the Transfer Notice was received by the Company.

If the Company fails to exercise its Right of First Refusal within thirty (30) days after the date when it received the Transfer Notice, you may, not later than ninety (90) days following receipt of the

Transfer Notice by the Company, conclude a transfer of the Stock subject to the Transfer Notice on the terms and conditions described in the Transfer Notice. Any proposed transfer on terms and conditions different from those described in the Transfer Notice, as well as any subsequent proposed transfer by you, shall again be subject to the Right of First Refusal and shall require compliance with the procedure described in the paragraph above. If the Company exercises its Right of First Refusal, the parties shall consummate the sale of the Stock on the terms set forth in the Transfer Notice within 60 days after the date when the Company received the Transfer Notice (or within such longer period as may have been specified in the Transfer Notice); provided, however, that in the event the Transfer Notice provided that payment for the Stock was to be made in a form other than lawful money paid at the time of transfer, the Company shall have the option of paying for the Stock with lawful money equal to the present value of the consideration described in the Transfer Notice.

In the case of any purchase of Stock under this Right of First Refusal, at the option of the Company, the Company may pay you the purchase price in three or fewer annual installments. Interest shall be credited on the installments at the applicable federal rate (as determined for purposes of Section 1274 of the Code) in effect on the date on which the purchase is made. The Company shall pay at least one-third of the total purchase price each year, plus interest on the unpaid balance, with the first payment being made on or before the 60th day after the purchase.

The Company's rights under this subsection shall be freely assignable, in whole or in part, shall inure to the benefit of its successors and assigns and shall be binding upon any transferee of the shares of Stock.

The Company's Right of First Refusal shall terminate in the event that the Stock is listed on an established national or regional stock exchange, is admitted for quotation on The Nasdaq Stock Market, Inc., or is publicly traded in an established securities market.

Right to Repurchase

Following termination of your Service for any reason, the Company shall have the right to purchase all of those shares of Stock that you have or will acquire under this option. If the Company exercises its right to purchase the shares, the Company will notify you of its intention to purchase such shares, and will consummate the purchase within one year (or 90 days to the extent required by applicable law) of your termination of Service or, in the case of Stock acquired after your termination of Service, within one year (or 90 days to the extent required by applicable law) of the date of exercise.

	The purchase price shall be the Fair Market Value of the shares on the date of your termination of Service if the Company exercises its right to purchase such shares within 90 days of your termination of Service or exercises its right within 90 days of the date of your exercise of the option following termination of Service; otherwise the purchase price shall be the Fair Market Value of the shares on the date the Company gives you notice of its intent to exercise its right to purchase the shares. The Company's rights of repurchase shall terminate in the event that the Stock is listed on an established national or regional stock exchange, is admitted for quotation on The Nasdaq Stock Market, Inc., or is publicly traded in an established securities market.
Retention Rights	Neither your option nor this Agreement give you the right to be retained by the Company (or any Parent, Subsidiaries or Affiliates) in any capacity. The Company (and any Parent, Subsidiaries or Affiliates) reserve the right to terminate your Service at any time and for any reason.
Shareholder Rights	You, or your estate or heirs, have no rights as a shareholder of the Company until a certificate for your option's shares has been issued (or an appropriate book entry has been made). No adjustments are made for dividends or other rights if the applicable record date occurs before your stock certificate is issued (or an appropriate book entry has been made), except as described in the Plan.
Forfeiture of Rights	If you should take actions in competition with the Company, the Company shall have the right to cause a forfeiture of your rights, including, but not limited to, the right to cause: (i) a forfeiture of any outstanding option, and (ii) with respect to the period commencing twelve (12) months prior to your termination of Service with the Company and ending twelve (12) months following such termination of Service (A) a forfeiture of any gain recognized by you upon the exercise of an option or (B) a forfeiture of any Stock acquired by you upon the exercise of an option (but the Company will pay you the option price without interest). Unless otherwise specified in an employment or other agreement between the Company and you, you take actions in competition with the Company if you directly or indirectly, own, manage, operate, join or control, or participate in the ownership, management, operation or control of, or are a proprietor, director, officer, stockholder, member, partner or an employee or agent of, or a consultant to any business, firm, corporation, partnership or

other entity which competes with any business in which the Company or any of its Affiliates is engaged during your employment or other relationship with the Company or its Affiliates or at the time of your termination of Service. Under the prior sentence, ownership of less than 1% of the securities of a public company shall not be treated as an action in competition with the Company.

Adjustments

In the event of a stock split, a stock dividend or a similar change in the Stock, the number of shares covered by this option and the option price per share may be adjusted (and rounded down to the nearest whole number) pursuant to the Plan. Your option shall be subject to the terms of the agreement of merger, liquidation or reorganization in the event the Company is subject to such corporate activity.

Legends

All certificates representing the Stock issued upon exercise of this option shall, where applicable, have endorsed thereon the following legends:

"THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND OPTIONS TO PURCHASE SUCH SHARES SET FORTH IN AN AGREEMENT BETWEEN THE COMPANY AND THE REGISTERED HOLDER, OR HIS OR HER PREDECESSOR IN INTEREST. A COPY OF SUCH AGREEMENT IS ON FILE AT THE PRINCIPAL OFFICE OF THE COMPANY AND WILL BE FURNISHED UPON WRITTEN REQUEST TO THE SECRETARY OF THE COMPANY BY THE HOLDER OF RECORD OF THE SHARES REPRESENTED BY THIS CERTIFICATE."

"THE SHARES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED OR QUALIFIED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION, AND MAY NOT BE SOLD, PLEDGED, OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION OR QUALIFICATION THEREOF UNDER SUCH ACT AND SUCH APPLICABLE STATE OR OTHER JURISDICTION'S SECURITIES LAWS OR AN OPINION OF COUNSEL, SATISFACTORY TO THE COMPANY AND ITS COUNSEL, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED."

Applicable Law

This Agreement will be interpreted and enforced under the laws of the State of Delaware, other than any conflicts or choice of law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction.

The Plan	The text of the Plan is incorporated in this Agreement by reference. Certain capitalized terms used in this Agreement are defined in the Plan, and have the meaning set forth in the Plan. This Agreement and the Plan constitute the entire understanding between you and the Company regarding this option Any prior agreements, commitments or negotiations concerning this option are superseded.
Other Agreements	You agree, as a condition of the grant of this option, that in connection with the exercise of the option, you will execute such document(s) as necessary to become a party to any shareholder agreement or voting trust as the Company may require.

By signing the cover sheet of this Agreement, you agree to all of the terms and conditions described above and in the Plan.

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption “Experts” and to the use of our report dated August 16, 2013, in the Registration Statement (Form S-1) and related Prospectus of GlycoMimetics, Inc. for the registration of shares of its common stock.

/s/ Ernst & Young LLP

McLean, Virginia
August 21, 2013