Table of Contents

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

FORM 10-Q

(Mark one)

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

For the quarterly period ended June 30, 2021

OR

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

For the transition period from _____ to _____

Commission File Number 001-36177

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

Delaware **(State or Other Jurisdiction of Incorporation or Organization)**	**06-1686563** **(I.R.S. Employer Identification No.)**
9708 Medical Center Drive **Rockville, Maryland** **(Address of principal executive offices)**	**20850** **(Zip Code)**

(240) 243-1201
(Registrant's telephone number, including area code)

N/A
(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common Stock, $0.001 par value	GLYC	The Nasdaq Stock Market

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large Accelerated Filer ☐ Accelerated Filer ☐ Smaller Reporting Company ☒

Non-accelerated Filer ☒ Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act of 1934). Yes ☐ No ☒

The number of outstanding shares of the registrant's common stock, par value $0.001 per share, as of the close of business on August 3, 2021 was 51,539,010.

GLYCOMIMETICS, INC.

INDEX TO FORM 10-Q

Part I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

GLYCOMIMETICS, INC.
Balance Sheets

	June 30, 2021 (Unaudited)	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	$ 118,854,094	$ 137,035,017
Prepaid expenses and other current assets	1,460,867	1,238,328
Total current assets	120,314,961	138,273,345
Property and equipment, net	491,088	620,673
Prepaid research and development expenses	1,560,607	1,560,607
Deposits	52,320	52,320
Operating lease right-of-use asset	1,959,703	2,325,224
Total assets	$ 124,378,679	$ 142,832,169
Liabilities & stockholders' equity		
Current liabilities:		
Accounts payable	$ 1,174,589	$ 2,089,939
Accrued expenses	8,125,541	9,439,881
Lease liabilities	948,787	898,549
Total current liabilities	10,248,917	12,428,369
Noncurrent accrued expenses	408,323	264,329
Lease liabilities, net of current portion	1,435,019	1,920,015
Total liabilities	12,092,259	14,612,713
Stockholders' equity:		
Preferred stock; $0.001 par value; 5,000,000 shares authorized, no shares issued and outstanding at June 30, 2021 and December 31, 2020	—	—
Common stock; $0.001 par value; 100,000,000 shares authorized; 51,539,010 shares issued and outstanding at June 30, 2021; 49,017,622 shares issued and outstanding at December 31, 2020	51,539	49,018
Additional paid-in capital	450,377,754	437,639,991
Accumulated deficit	(338,142,873)	(309,469,553)
Total stockholders' equity	112,286,420	128,219,456
Total liabilities and stockholders' equity	$ 124,378,679	$ 142,832,169

The accompanying notes are an integral part of the unaudited financial statements.

GLYCOMIMETICS, INC.
Unaudited Statements of Operations and Comprehensive Loss

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Revenue	$ 142	$ —	$ 1,055,582	$ 9,000,000
Costs and expenses:				
Research and development expense	10,167,282	9,870,813	21,314,517	22,539,073
General and administrative expense	4,237,342	4,234,917	8,425,452	8,674,677
Total costs and expenses	14,404,624	14,105,730	29,739,969	31,213,750
Loss from operations	(14,404,482)	(14,105,730)	(28,684,387)	(22,213,750)
Interest income	5,221	26,701	11,067	472,117
Net loss and comprehensive loss	$ (14,399,261)	$ (14,079,029)	$ (28,673,320)	$ (21,741,633)
Basic and diluted net loss per common share	$ (0.28)	$ (0.32)	$ (0.56)	$ (0.50)
Basic and diluted weighted-average number of common shares	51,539,010	43,801,251	51,118,096	43,688,420

The accompanying notes are an integral part of the unaudited financial statements.

GLYCOMIMETICS, INC.
Unaudited Statements of Stockholders' Equity

	Common Stock		Additional Paid-In	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance at December 31, 2020	49,017,622	$ 49,018	$ 437,639,991	$ (309,469,553)	$ 128,219,456
Issuance of common stock, net of issuance costs	2,517,603	2,517	9,557,182	—	9,559,699
Exercise of options	3,785	4	4,235	—	4,239
Stock-based compensation	—	—	1,614,185	—	1,614,185
Net loss	—	—	—	(14,274,059)	(14,274,059)
Balance at March 31, 2021	51,539,010	51,539	448,815,593	(323,743,612)	125,123,520
Stock-based compensation	—	—	1,562,161	—	1,562,161
Net loss	—	—	—	(14,399,261)	(14,399,261)
Balance at June 30, 2021	51,539,010	$ 51,539	$ 450,377,754	$ (338,142,873)	$ 112,286,420

	Common Stock		Additional Paid-In	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance at December 31, 2019	43,466,933	$ 43,465	$ 412,599,772	$ (258,442,650)	$ 154,200,587
Exercise of options	116,046	116	129,856	—	129,972
Stock-based compensation	—	—	1,822,148	—	1,822,148
Net loss	—	—	—	(7,662,604)	(7,662,604)
Balance at March 31, 2020	43,582,979	43,581	414,551,776	(266,105,254)	148,490,103
Issuance of common stock, net of issuance costs	3,126,709	3,127	9,571,010	—	9,574,137
Exercise of options	5,010	5	5,606	—	5,611
Stock-based compensation	—	—	1,761,674	—	1,761,674
Net loss	—	—	—	(14,079,029)	(14,079,029)
Balance at June 30, 2020	46,714,698	$ 46,713	$ 425,890,066	$ (280,184,283)	$ 145,752,496

The accompanying notes are an integral part of the unaudited financial statements.

GLYCOMIMETICS, INC.
Unaudited Statements of Cash Flows

	Six Months Ended June 30,	
	2021	2020
Operating activities		
Net loss	$ (28,673,320)	$ (21,741,633)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	135,573	135,872
Loss on disposal of assets	2,174	—
Non-cash lease expense	365,521	332,413
Stock-based compensation	3,176,346	3,583,822
Changes in assets and liabilities:		
Prepaid expenses and other current assets	(222,539)	812,917
Accounts payable	(915,351)	(70,944)
Accrued expenses	(1,314,340)	(1,230,997)
Noncurrent accrued expenses	143,994	515,144
Lease liabilities	(434,757)	(388,646)
Net cash used in operating activities	(27,736,699)	(18,052,052)
Investing activities		
Purchases of property and equipment	(8,162)	(14,519)
Net cash used in investing activities	(8,162)	(14,519)
Financing activities		
Proceeds from issuance of common stock, net of issuance costs	9,559,699	9,574,137
Proceeds from exercise of stock options	4,239	135,583
Net cash provided by financing activities	9,563,938	9,709,720
Net change in cash and cash equivalents	(18,180,923)	(8,356,851)
Cash and cash equivalents, beginning of period	137,035,017	158,201,441
Cash and cash equivalents, end of period	$ 118,854,094	$ 149,844,590
Non-cash investing and financing activities		
Property acquisition costs included in accounts payable	$ —	$ 6,592

The accompanying notes are an integral part of the unaudited financial statements.

GLYCOMIMETICS, INC.
Notes to Unaudited Financial Statements

1. Description of the Business

GlycoMimetics, Inc. (the Company), a Delaware corporation headquartered in Rockville, Maryland, was incorporated in April 2003. The Company 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'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 and other personnel, initiating and overseeing research and development programs, including planned and ongoing clinical trials, and securing adequate capital for anticipated growth and operations. The Company has not commercialized any of its drug candidates or commenced commercial operations. The Company is subject to a number of risks similar to those of other companies in similar development stages, including dependence on key individuals, the need to develop commercially viable drugs, the need to successfully compete with other companies, many of whom are larger and better capitalized, and the need to obtain adequate additional financing to fund the development of its drug candidates. The Company has incurred significant operating losses since inception and has relied on its ability to fund its operations through private and public equity financings, and management expects operating losses and negative operating cash flows to continue for the foreseeable future. As the Company continues to incur losses, profitability will be dependent upon the successful development, approval and commercialization of its drug candidates and achieving a level of revenues adequate to support the Company's cost structure. The Company may never achieve profitability, and unless and until it does, the Company will continue to need to raise additional capital. The Company believes that its currently available funds will be sufficient to fund the Company's operations through at least 12 months from the date of the filing of this Quarterly Report. Management intends to fund future operations through additional public or private equity or debt offerings and may seek additional capital through arrangements with strategic partners or from other sources.

2. 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).

Unaudited Financial Statements

The accompanying balance sheet as of June 30, 2021, statements of operations and comprehensive loss and stockholders' equity for the three and six months ended June 30, 2021 and 2020 and statements of cash flows for the six months ended June 30, 2021 and 2020 are unaudited. These unaudited financial statements have been prepared in accordance with the rules and regulations of the United States Securities and Exchange Commission (the SEC) for interim financial information. Accordingly, they do not include all of the information and footnotes required by GAAP for complete annual financial statements. These financial statements should be read in conjunction with the audited financial statements and the accompanying notes for the year ended December 31, 2020 contained in the Company's Annual Report on Form 10-K filed with the SEC on March 2, 2021. The unaudited interim financial statements have been prepared on the same basis as the annual financial statements and in the opinion of management reflect all adjustments (consisting of normal recurring adjustments) necessary to state fairly the Company's financial position as of June 30, 2021 and its results of operations and changes in its stockholders' equity for the three and six months ended June 30, 2021 and 2020 and its cash flows for the six months ended June 30, 2021 and 2020. The December 31, 2020 balance sheet included herein was derived from audited financial statements, but does not include all disclosures including notes required by GAAP for complete annual financial statements. The financial data and other information

disclosed in these notes to the financial statements related to the three and six months ended June 30, 2021 and 2020 are unaudited. Interim results are not necessarily indicative of results for an entire year or for any future period.

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.

Fair Value Measurements

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 June 30, 2021 and December 31, 2020. The carrying value of cash held in money market funds of $116.9 million and $135.0 million as of June 30, 2021 and December 31, 2020, 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 money market funds with major financial institutions in the United States. These funds may be redeemed upon demand and, therefore, bear minimal risk. The Company does not anticipate any losses on such balances.

Revenue Recognition

The Company applies Accounting Standards Codification, or ASC, Topic 606, *Revenue from Contracts with Customers* (Topic 606), to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, collaboration arrangements and financial instruments. Under Topic 606, an entity recognizes revenue when its customer obtains control of promised goods or services in an amount that reflects the consideration which the entity expects to receive in exchange for those goods and services. To determine revenue recognition for arrangements that an entity determines are within the scope of Topic 606, the entity performs the following five steps: (i) identify the contract(s) with the customer(s); (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Company only applies the five-step model to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods and services it transfers to the customer. At contract inception, the Company assesses the goods or services promised within each contract that falls under the scope of Topic 606, determines those that are performance obligations and assesses whether each promised good or service is distinct. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

The Company enters into licensing agreements which are within the scope of Topic 606, under which it licenses certain of its drug candidates' rights to third parties. The terms of these arrangements typically include payment of one or more of the following: non-refundable, up-front license fees; development, regulatory and commercial milestone payments; and royalties on net sales of the licensed product, if and when earned. See Note 9 for additional information regarding the Company's license agreement.

In determining the appropriate amount of revenue to be recognized as it fulfills its obligation under each of its agreements, the Company performs the five steps under Topic 606 described above. As part of the accounting for these arrangements, the Company must develop assumptions that require judgment to determine the stand-alone selling price, which may include forecasted revenues, development timelines, reimbursement of personnel costs, discount rates and probabilities of technical and regulatory success.

Licensing of Intellectual Property: If the license to the Company's intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, the Company recognizes revenue from non-refundable, up-front fees allocated to the license when the license is transferred to the licensee and the licensee is able to use and benefit from the license. For licenses that are bundled with other promises, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue from non-refundable, up-front fees. The Company evaluates the measure of progress each reporting period, and, if necessary, adjusts the measure of performance and related revenue recognition.

Milestone Payments: At the inception of each arrangement that includes development milestone payments, the Company evaluates whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal will not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within the control of the Company or the licensee, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. The transaction price is then allocated to each performance obligation on a relative stand-alone selling price basis, for which the Company recognizes revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, the Company re-evaluates the probability of achievement of such development milestones and any related constraint and, if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect license, collaboration and other revenues and earnings in their period of adjustment.

Royalties: For arrangements that include sales-based royalties, including milestone payments based on the level of sales, and for which the license is deemed to be the predominant item to which royalties relate, the Company recognizes revenue at the later of (i) when the related sales occur or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, the Company has not recognized any royalty revenue from its license agreements.

Manufacturing and Supply: The promises under the Company's agreements may include clinical and/or commercial manufacturing products to be provided by the Company to the counterparty. The services are generally determined to be distinct from the other promises or performance obligations identified in the arrangement. The Company recognizes the transaction price allocated to these services as revenue at a point in time when transfer of control of the related products to the customer occurs.

Accruals for Clinical Trial Expenses

Clinical trial costs primarily consist of expenses incurred under agreements with contract research organizations (CROs), investigative sites, laboratory testing expenses, data management and consultants that conduct the Company's clinical trials. Clinical trial expenses are a significant component of research and development expenses, and the Company outsources a significant portion of these clinical trial activities to third parties. The accrual for site and patient costs includes inputs such as estimates of patient enrollment, patient cycles incurred, clinical site activations, estimated project duration and other pass-through costs. These inputs are required to be estimated due to a lag in receiving the actual clinical information from third parties. 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 on the balance sheets as a prepaid asset or accrued expenses. These third-party agreements are generally cancellable, and related costs are recorded as research and development expenses as incurred. Except for payments made in advance of services, clinical trial costs are expensed as incurred. Non-refundable advance clinical payments for goods or services that will be used or rendered for future research and development activities are recorded as a prepaid asset and recognized as expense as the related goods are delivered or the related services are performed. When evaluating the adequacy of the accrued expenses, management assessments include: (i) an evaluation by the project manager of the work that has been completed during the period; (ii) measurement of progress prepared internally and/or provided by the third-party service provider; (iii) analyses of data that justify the progress; and (iv) the Company's judgment. Significant judgments and estimates may be made in determining the accrued balances at the end of any reporting period. Actual results could differ from the estimates made. The Company's historical clinical accrual estimates have not been materially different from the actual costs. Clinical trial accruals that are due longer than one year are classified as noncurrent accrued expenses.

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-Merton model. The resulting fair value is recognized ratably over the requisite service period, which is generally the vesting period of the option. The Company accounts for forfeitures as they occur and does not make an estimate of expected forfeitures at the time of grant.

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:

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 bases the expected volatility on the historical volatility of the Company's publicly traded common stock.

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.

Net Loss Per Common Share

Basic net loss per common share is determined by dividing net loss by the weighted-average number of common shares outstanding during the period, without consideration of common stock equivalents. Diluted net loss per share is computed by dividing net loss by the weighted-average number of common stock equivalents outstanding for the period. The treasury stock method is used to determine the dilutive effect of the Company's stock options and restricted stock units.

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

	Six Months Ended June 30,	
	2021	2020
Stock options and restricted stock units	6,596,390	6,429,701

Comprehensive Loss

Comprehensive loss comprises net loss and other changes in equity that are excluded from net loss. For the three and six months ended June 30, 2021 and 2020, the Company's net loss equaled comprehensive net loss and, accordingly, no additional disclosure is presented.

Recently Issued Accounting Standards

Adopted Accounting Standards

In December 2019, the FASB issued ASU 2019-12. ASU 2019-12 removes certain exceptions for recognizing deferred taxes for investments, performing intra-period allocation and calculating income taxes in interim periods. The ASU also adds guidance to reduce complexity in certain areas, including deferred taxes for goodwill and allocating taxes for members of a consolidated group. ASU 2019-12 was effective for all entities for fiscal years beginning after December 15, 2020. As of January 1, 2021, the Company adopted the standard, which did not have a material impact on the Company's financial statements.

Accounting Standards Not Yet Adopted

With the exception of the new standard discussed above, there have been no new accounting pronouncements that have significance, or potential significance, to the Company’s financial statements.

3. Prepaid Expenses and Other Current Assets

The following is a summary of the Company’s prepaid expenses and other current assets:

	June 30, 2021	December 31, 2020
Prepaid research and development expenses	$ 938,913	$ 965,504
Other prepaid expenses	520,298	270,675
Other receivables	1,656	2,149
Prepaid expenses and other current assets	$ 1,460,867	$ 1,238,328

4. Property and Equipment

Property and equipment, net consists of the following:

	June 30, 2021	December 31, 2020
Furniture and fixtures	$ 345,712	$ 345,712
Laboratory equipment	1,406,346	1,446,596
Office equipment	16,755	16,755
Computer equipment	300,010	327,776
Leasehold improvements	616,133	616,133
Property and equipment	2,684,956	2,752,972
Less accumulated depreciation	(2,193,868)	(2,132,299)
Property and equipment, net	$ 491,088	$ 620,673

Depreciation expense was $67,485 and $67,681 for the three months ended June 30, 2021 and 2020, respectively, and $135,573 and $135,872 for the six months ended June 30, 2021 and 2020, respectively.

5. Accrued Expenses

The following is a summary of the Company's accrued expenses:

	June 30, 2021	December 31, 2020
Accrued research and development expenses	$ 4,769,711	$ 5,114,420
Accrued bonuses	2,002,407	3,341,184
Accrued consulting and other professional fees	380,181	194,760
Accrued employee benefits	785,276	569,048
Other accrued expenses	187,966	220,469
Accrued expenses	$ 8,125,541	$ 9,439,881

6. Leases

At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the circumstances present. The Company determines a lease exists if the contract conveys the right to control an identified asset for a period of time in exchange for consideration. Control is considered to exist when the lessee has the right to obtain substantially all of the economic benefits from the use of an identified asset as well as direct the right to use of that asset. Leases with a term greater than one year are recognized on the balance sheet as right-of-use assets, lease liabilities and, if applicable, long-term lease liabilities. The Company has elected not to recognize on the balance sheet leases with terms of one year or less on the lease commencement date. If a contract is considered to be a lease, the Company recognizes a lease liability based on the present value of the future lease payments over the expected lease term, with an offsetting entry to recognize a right-of-use asset.

The interest rate implicit in lease contracts is typically not readily determinable. As such, the Company utilizes the appropriate incremental borrowing rate, which is the rate incurred to borrow on a collateralized basis over a term similar to the term of the lease for which the rate is estimated. Certain adjustments to the right-of-use asset may be required for items such as initial direct costs paid or incentives received.

The Company leases office and research space in Rockville, Maryland under an operating lease with a term from June 15, 2015 through October 31, 2023 (the Lease) that is subject to annual rent increases. The Company has the right to sublease or assign all or a portion of the premises, subject to the conditions set forth in the Lease. The Lease may be terminated early by either the landlord or the Company in certain circumstances. In connection with the Lease, the Company received rent abatement as a lease incentive in the initial year of the Lease.

In March 2016, the Company amended the Lease (the Lease Amendment) to lease additional space as of June 1, 2016. In May 2016, the Company also paid a security deposit of $52,320 to be held until the expiration or termination of the Company's obligations under the Lease. The term of the Lease Amendment for the additional space continues through October 31, 2023, the same date as for the premises originally leased under the Lease, subject to the Company's renewal option set forth in the Lease.

The Company identified and applied the following significant assumptions in recognizing the right-of-use asset and corresponding liability for the Lease and Lease Amendment:

- ***Lease term*** – The lease term includes both the noncancelable period and, when applicable, cancelable option periods where failure to exercise such option would result in an economic penalty. The Company's renewal option to extend was not reasonably certain of being exercised as of June 30, 2021.

- ***Incremental borrowing rate*** – As the Company's lease does not provide an implicit rate, the Company used an incremental borrowing rate, or IBR, which is the rate incurred to borrow on a collateralized basis over a term similar to the term of the lease for which the rate is estimated. The Company determined the IBR to be 8.0% based on an estimated rate that considered the Company's credit risk in the United States for a collateralized borrowing and term similar to the Lease.

As of June 30, 2021, the weighted-average remaining lease term was 2.3 years. There were no additional operating leases entered into during the six months ended June 30, 2021.

The components of lease expense and related cash flows were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Operating lease cost	$ 231,989	$ 231,989	$ 463,979	$ 463,979
Variable lease cost	51,608	144,009	198,029	305,955
Total operating lease cost	$ 283,597	$ 375,998	$ 662,008	$ 769,934
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash outflows for operating leases	$ 267,001	$ 260,489	$ 533,216	$ 520,211

Maturities of lease liability due under these lease agreements as of June 30, 2021 were as follows:

	Operating Lease Obligation
July 1, 2021 - December 31, 2021	$ 544,253
2022	1,104,356
2023	940,840
2024	—
2025	—
Thereafter	—
Total	2,589,449
Present value adjustment	(205,643)
Present value of lease payments	$ 2,383,806

7. Stockholders' Equity

At-The-Market Sales Facility

On September 28, 2017, the Company entered into an at-the-market sales agreement (the 2017 Sales Agreement) with Cowen and Company, LLC (Cowen) to sell up to $100.0 million of the Company's common stock registered under a shelf registration statement filed with the U.S. Securities and Exchange Commission in September 2017. During the six months ended June 30, 2020, the Company issued and sold 3,126,709 shares of common stock under the 2017 Sales Agreement. The shares were sold at a weighted average per share of $3.16, for aggregate net proceeds of $9.6 million, after deducting commissions and offering expenses. The shelf registration statement under which the shares that could be sold under the 2017 Sales Agreement were registered expired on October 6, 2020.

On October 7, 2020, the Company filed a prospectus supplement to a shelf registration statement that it filed in May 2019 and entered into a new at-the-market sales agreement (the 2020 Sales Agreement) with Cowen. Under the 2020 Sales Agreement, the Company may sell up to $100.0 million of the Company's common stock registered under the shelf registration statement that was filed in May 2019. The 2020 Sales Agreement replaces the 2017 Sales Agreement between the Company and Cowen, and the $100.0 million that may be sold under the 2020 Sales Agreement excludes any amounts that were sold under the 2017 Sales Agreement. During the six months ended June 30, 2021, the Company issued and sold 2,517,603 shares of common stock under the 2020 Sales Agreement at a weighted average price per share of $3.92, for aggregate net proceeds of $9.6 million, after deducting commissions and offering expenses. As of June 30, 2021, approximately $86.3 million remained available to be sold under the terms of the 2020 Sales Agreement. Subsequent to June 30, 2021, there have been no additional sales under the 2020 Sales Agreement.

2003 Stock Incentive Plan

The 2003 Stock Incentive Plan (the 2003 Plan) provided 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 termination date. Stock options terminate 10 years from the date of grant. The 2003 Plan expired on May 21, 2013.

A summary of the Company's stock option activity under the 2003 Plan for the six months ended June 30, 2021 is as follows:

	OUTSTANDING OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE	WEIGHTED-AVERAGE REMAINING CONTRACTUAL TERM (YEARS)	AGGREGATE INTRINSIC VALUE (IN THOUSANDS)
Outstanding as of December 31, 2020	97,250	$ 1.96	1.3	
Options exercised	(3,785)	1.12		
Options forfeited	—	—		
Outstanding, Vested and Exercisable as of June 30, 2021	93,465	2.00	0.8	$ 31

As of June 30, 2021, outstanding options under the 2003 Plan were fully expensed and all shares underlying outstanding options were fully vested. Total intrinsic value of the options exercised during the six months ended June 30, 2021 and 2020 was $8,668 and $468,458, respectively, and total cash received for options exercised was $4,239 and $135,583 during the six months ended June 30, 2021 and 2020, respectively.

2013 Equity Incentive Plan

The Company's board of directors adopted, and its stockholders approved, its 2013 Equity Incentive Plan (the 2013 Plan) effective on January 9, 2014. The 2013 Plan provides for the grant of incentive stock options within the meaning of Section 422 of the Internal Revenue Code to the Company's employees and its 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 its employees, including officers, consultants and directors. The 2013 Plan also provides for the grant of performance cash awards to the Company's employees, consultants and directors. Unless otherwise stated in a stock option agreement, 25% of the shares subject to an option grant will typically vest upon the first anniversary of the vesting start date, with the balance of the shares vesting in a series of thirty-six successive equal monthly installments as of the first day of each month measured from the first anniversary of the vesting start date. Upon termination of employment by reasons other than death, cause, or disability, any vested options will terminate 90 days after the termination date, unless otherwise set forth in a stock option agreement. Stock options generally terminate 10 years from the date of grant.

Authorized Shares

The maximum number of shares of common stock that initially could be issued under the 2013 Plan was 1,000,000 shares, plus any shares subject to stock options or similar awards granted under the 2003 Plan that expire or terminate without having been exercised in full or are forfeited or repurchased by the Company. The number of shares of common stock reserved for issuance under the 2013 Plan automatically increases on January 1 of each year until January 1, 2023, by 3% of the total number of shares of common stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares as may be determined by the Company's board of directors. The maximum number of shares that may be issued pursuant to exercise of incentive stock options under the 2013 Plan is 20,000,000 shares.

Shares issued under the 2013 Plan may be authorized but unissued or reacquired shares of common stock. Shares subject to stock awards granted under the 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 the 2013 Plan. Additionally, shares issued pursuant to stock awards under the 2013 Plan that the Company repurchases or that are forfeited, as well as shares reacquired by the Company 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 the 2013 Plan.

A summary of the Company's stock option activity under the 2013 Plan for the six months ended June 30, 2021 is as follows:

	OUTSTANDING OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE	WEIGHTED-AVERAGE REMAINING CONTRACTUAL TERM (YEARS)	AGGREGATE INTRINSIC VALUE (IN THOUSANDS)
Outstanding as of December 31, 2020	5,753,211	$ 8.93	6.6	
Options granted	898,100	3.70		
Options exercised	—	—		
Options forfeited	(815,132)	8.32		
Outstanding as of June 30, 2021	5,836,179	8.22	6.8	$ —
Vested or expected to vest as of June 30, 2021	5,836,179	8.22	6.8	—
Exercisable as of June 30, 2021	4,128,319	9.17	5.2	—

As of June 30, 2021, there was $8,015,737 of total unrecognized compensation expense related to unvested options under the 2013 Plan that will be recognized over a weighted-average period of approximately 2.1 years. There were no options exercised under the 2013 Plan during the six months ended June 30, 2021 and 2020. The total fair value of shares underlying options which vested in the six months ended June 30, 2021 and 2020 was $3,745,954 and $5,014,602, respectively.

A restricted stock unit (RSU) is a stock award that entitles the holder to receive shares of the Company's common stock as the award vests. The fair value of each RSU is based on the closing price of the Company's common stock on the date of grant. During the six months ended June 30, 2021, the Company awarded RSUs under the 2013 Plan to all of its employees. The RSUs granted vest over four years in equal installments on each anniversary of the grant date. Compensation expense is recognized on a straight-line basis. As of June 30, 2021, there was $1,456,954 of total unrecognized compensation expense associated with outstanding RSU grants that will be recognized over a weighted-average period of approximately 1.9 years.

The following is a summary of RSU activity under the 2013 Plan for the six months ended June 30, 2021:

	Number of Shares Underlying RSUs	Weighted-Average Grant Date Fair Value
Unvested at December 31, 2020	192,533	$ 4.53
Granted	444,613	3.72
Forfeited	(46,492)	3.83
Vested	—	—
Unvested at June 30, 2021	590,654	3.98

Inducement Plan

In January 2020, the Company's board of directors adopted the GlycoMimetics, Inc. Inducement Plan (the Inducement Plan). The Inducement Plan provides for the grant of nonstatutory stock options, restricted stock awards, restricted stock unit awards, stock appreciation rights and other forms of stock awards to individuals not previously an employee or director of the Company as an inducement for such individuals to join the Company. Unless otherwise stated in an applicable stock option agreement, one-fourth of the shares subject to an option grant under the Inducement

Plan will typically vest upon the first anniversary of the vesting start date, with the balance of the shares vesting in a series of thirty-six successive equal monthly installments as of the first day of each month measured from the first anniversary of the vesting start date, subject to the new employee's continued service with the Company through the applicable vesting dates. Upon termination of employment by reasons other than death, cause or disability, any vested options will terminate 90 days after the termination date, unless otherwise set forth in a stock option agreement. Stock options generally terminate 10 years from the date of grant. There were 500,000 shares of common stock reserved under the Inducement Plan at its adoption date. In August 2021, the Company's board of directors adopted an amendment to the Inducement Plan to increase the number of shares reserved to 2,000,000 shares.

A summary of the Company's stock option activity under the Inducement Plan for the six months ended June 30, 2021 is as follows:

	OUTSTANDING OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE	WEIGHTED-AVERAGE REMAINING CONTRACTUAL TERM (YEARS)	AGGREGATE INTRINSIC VALUE (IN THOUSANDS)
Outstanding as of December 31, 2020	100,600	$ 3.09	9.5	
Options granted	—	—		
Options exercised	—	—		
Options forfeited	(24,508)	2.06		
Outstanding as of June 30, 2021	76,092	3.42	8.1	$ 4
Vested or expected to vest as of June 30, 2021	76,092	3.42	8.1	4
Exercisable as of June 30, 2021	11,967	2.06	1.6	3

As of June 30, 2021, there was $132,210 of total unrecognized compensation expense related to unvested options under the Inducement Plan that will be recognized over a weighted-average period of approximately 3.1 years. The total fair value of shares underlying options which vested in the six months ended June 30, 2021 was $17,591. There were no options that vested during the six months ended June 30, 2020. There were no options exercised under the Inducement Plan during the six months ended June 30, 2021 and 2020.

The weighted-average fair value of the options granted under the 2013 Plan and Inducement Plan during the six months ended June 30, 2021 and 2020 was $2.63 per share and $3.19 per share, respectively, applying the Black-Scholes-Merton option pricing model utilizing the following weighted-average assumptions:

	Six Months Ended June 30,	
	2021	2020
Expected term	6.25 years	6.25 years
Expected volatility	83.75%	84.39%
Risk-free interest rate	0.67%	1.45%
Expected dividend yield	0%	0%

Stock-based compensation expense was classified on the statements of operations as follows for the three and six months ended June 30, 2021 and 2020:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Research and development expense	$ 609,321	$ 747,006	$ 1,298,294	$ 1,483,037
General and administrative expense	952,840	1,014,667	1,878,052	2,100,785
Total stock-based compensation expense	$ 1,562,161	$ 1,761,673	$ 3,176,346	$ 3,583,822

8. Income Taxes

The Company has not recorded any tax provision or benefit for the six months ended June 30, 2021 and 2020. The Company has provided a valuation allowance for the full amount of its net deferred tax assets since realization of any future benefit from deductible temporary differences, net operating loss carryforwards and research and development credits is not more-likely-than-not to be realized at June 30, 2021 and December 31, 2020.

9. License and Collaboration Agreements

Apollomics

In January 2020, the Company entered into a collaboration and license agreement (the Agreement) with Apollomics (Hong Kong), Limited (Apollomics) for the development, manufacture and commercialization of products derived from two of the Company's compounds, GMI-1271 and GMI-1687 (the Products) for therapeutic and prophylactic uses (the Field) in China, Taiwan, Hong Kong and Macau (the Territory). Under the terms of the Agreement, the Company granted Apollomics:

- an exclusive license, with the right to sublicense, to develop, manufacture and have manufactured, distribute, market, promote, sell, have sold, offer for sale, import, label, package and otherwise the Products in the Field in the Territory; and
- a non-exclusive license to conduct preclinical research with respect to Products in the Field outside of the Territory for the purposes of developing such Products for use in the Territory.

The Company evaluated the Agreement under the provisions of ASC 606 and identified two performance obligations under this revenue arrangement: the (i) delivery of functional licenses and (ii) manufacture and supply of the Products. The initial transaction price consists of a $9.0 million non-refundable up-front payment which was allocated to the delivered functional licenses and recognized in full as revenue in the first quarter of 2020 given that the performance obligation was satisfied upon inception. The Agreement contains various forms of variable consideration, including (i) up to $75.0 million in development milestones based on achievement of certain clinical and regulatory events, (ii) up to $105.0 million of sales-based commercial milestones based on achievement of certain annual net sales targets, (iii) sales-based royalties at specified percentages of net sales ranging from the high single digits to 15%, and (iv) manufacture and supply of clinical and commercial Products. The Company has fully constrained the development milestone consideration using the most likely amount method and will recognize that revenue when it is probable that recognition of revenue related to the milestone will not result in a significant reversal in amounts recognized in future periods, and as such have been excluded from the transaction price. In September 2020, the Company received a non-refundable $1.0 million development milestone payment upon acceptance by Chinese regulatory authorities of a Phase 3 bridging study design to support registration in China. The Company recognized this $1.0 million payment as revenue in the third quarter of the year ended December 31, 2020. The Company will recognize revenue related to the sales-based commercial and royalty milestones and royalties at the later of (i) when the related sales occur or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied), as they were determined to relate predominantly to the licenses granted to Apollomics and, therefore, have been excluded from the transaction price. Lastly, the Company has determined that the consideration for the manufacturing and supply is all variable and is fully constrained. Variable consideration allocated to manufacturing and supply will be recognized at a point in time when the Product is delivered and when the title to the Product is transferred to the customer pursuant to the agreement. The Company reassesses the transaction price in each reporting period and upon the occurrence of a change in circumstances or final resolution of any particular event.

In June 2020, the Company and Apollomics entered into a clinical supply agreement pursuant to which the Company will manufacture and supply the Products at agreed upon prices. Apollomics has the option to begin manufacture of the Products after appropriate material transfer requirements are met. During the six months ended June 30, 2021, the Company recognized $1.1 million as revenue from the sale of clinical supplies to Apollomics.

10. Risks and Uncertainties

COVID-19

In March 2020, the World Health Organization declared the novel coronavirus disease 2019, or COVID-19, outbreak a pandemic. In order to mitigate the spread of COVID-19, governments have imposed unprecedented restrictions on business operations, travel and gatherings, resulting in a global economic downturn and other adverse economic and societal impacts. The COVID-19 pandemic has also overwhelmed or otherwise led to changes in the operations of many healthcare facilities.

The impact of the COVID-19 pandemic on the Company's business and financial performance is uncertain and depends on various factors, including the duration of the pandemic, government restrictions and other actions, including relief measures and mass vaccination efforts, implemented to address the impact of the pandemic, and resulting impacts on the financial markets and overall economy. The imposition of "lockdown," "social distancing" and "shelter in place" directives by state and federal governments in the United States as well as governments in other regions of the world in response to the COVID-19 pandemic, including in locations in which its Phase 3 clinical trial of uproleselan is being conducted, resulted in slowed clinical site initiation, patient recruitment and enrollment rates early in the pandemic. Enrollment rates have returned to forecasted levels since the lockdowns. However, the COVID-19 infection rates continue to fluctuate which could negatively affect enrollment going forward. The Company is unable to determine the extent of the impact of the pandemic on its operations and financial condition going forward. These developments are highly uncertain and unpredictable, and may materially adversely affect the Company's financial position and results of operations. The Company continues to closely monitor the COVID-19 situation and any potential impact to its planned activities.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Certain statements contained in this Quarterly Report on Form 10-Q may constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. The words or phrases "would be," "will allow," "intends to," "will likely result," "are expected to," "will continue," "is anticipated," "estimate," "project," or similar expressions, or the negative of such words or phrases, are intended to identify "forward-looking statements." We have based these forward-looking statements on our current expectations and projections about future events. Because such statements include risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. Factors that could cause or contribute to these differences include those below and elsewhere in this Quarterly Report on Form 10-Q, our Annual Report on Form 10-K, particularly in Part I – Item 1A, "Risk Factors," and our other filings with the Securities and Exchange Commission. Statements made herein are as of the date of the filing of this Form 10-Q with the Securities and Exchange Commission and should not be relied upon as of any subsequent date. Unless otherwise required by applicable law, we do not undertake, and we specifically disclaim, any obligation to update any forward-looking statements to reflect occurrences, developments, unanticipated events or circumstances after the date of such statement.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited financial statements and related notes that appear in Item 1 of this Quarterly Report on Form 10-Q and with our audited financial statements and related notes for the year ended December 31, 2020, which are included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 2, 2021.

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. We are developing a pipeline of proprietary glycomimetics, which are small molecules that mimic the structure of carbohydrates involved in important biological processes, to 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 efforts on drug candidates for diseases that we believe will qualify for orphan drug designation.

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 carbohydrate structures to the surface of such proteins, which affects the functions of the 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 tumor metastasis and resistance to chemotherapy. 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 carbohydrate compounds that inhibit binding with selectins, known as selectin antagonists, has historically been limited by their potency and the complexities of carbohydrate chemistry. We believe our expertise in the rational design of potent glycomimetic antagonists with drug-like properties and in carbohydrate chemistry enable us to design highly effective selectin antagonists and other glycomimetics that may inhibit the disease-related functions of certain carbohydrates in order to develop novel drug candidates to address orphan diseases with high unmet medical need.

Our lead glycomimetic drug candidate, uproleselan, is a specific E-selectin inhibitor that we are developing to be used in combination with chemotherapy to treat patients with acute myeloid leukemia, or AML, a life-threatening hematologic cancer, and potentially other hematologic cancers. In 2018, we commenced a randomized, double-blind, placebo-controlled Phase 3 pivotal clinical trial to evaluate uproleselan in individuals with relapsed/refractory AML, the design of which was based on guidance received from the U.S. Food and Drug Administration, or FDA. We intend to enroll approximately 380 adult patients with relapsed or refractory AML at centers in the United States, Canada, Europe and Australia. We expect to complete enrollment of the trial by year-end 2021.

In 2018, we also signed a Cooperative Research and Development Agreement, or CRADA, with the National Cancer Institute, or NCI, part of the National Institutes of Health, to conduct a Phase 2/3 randomized, controlled clinical trial testing the addition of uproleselan to a standard chemotherapy regimen. The trial opened for enrollment in early 2019 and enrolled the first patient in April 2019.

Uproleselan is also being studied in multiple investigator-sponsored trials (ISTs). In May 2021, clinicians at the Washington University School of Medicine in St. Louis dosed the first patient in an IST evaluating uproleselan as a prophylactic agent to reduce gastrointestinal (GI) toxicities and improve clinical outcomes in patients receiving high-dose melphalan in autologous hematopoietic cell transplantation (auto-HCT) for multiple myeloma. We anticipate a data readout from the trial in 2022.

In July 2021, clinicians at the University of California (UC) Davis Comprehensive Cancer Center initiated dosing of the first patient in a clinical study of uproleselan combined with venetoclax and azacitidine for the treatment of older or unfit patients with treatment-naïve AML. The goal of the two-part IST is first to determine a recommended Phase 2 dose, and then to explore efficacy in a dose expansion cohort. We are providing uproleselan for the IST. Up to 31 patients will be enrolled, and a preliminary/interim readout is expected in 2022.

In July 2021, clinicians at the University of Texas MD Anderson Cancer Center treated the first patient in a Phase 1b/2 study evaluating uproleselan, added to cladribine plus low dose cytarabine in patients with treated secondary AML (ts-AML). We are providing uproleselan for the IST. The Phase 1b/2 single-arm trial is enrolling patients 18 years or older, with a diagnosis of ts-AML who have not received therapy for their AML. Considered a distinct high-risk subset of AML with an adverse prognosis, ts-AML is defined as AML arising from a previously treated antecedent myeloid neoplasm (myelodysplastic syndrome or myeloproliferative neoplasm). Clinicians plan to enroll approximately 25 patients in the trial and a preliminary/interim readout is expected in 2022.

We have rationally designed an innovative antagonist of E-selectin, GMI-1687, that could be a subcutaneously administered treatment. Initially developed as a potential life-cycle extension to uproleselan, we believe that GMI-1687 could be developed to broaden the clinical usefulness of an E-selectin antagonist to conditions where outpatient treatment is preferred or required. We are currently conducting preclinical activities and studies with GMI-1687 to support our planned submission of an investigational new drug application, or IND, to the FDA.

We are also developing a drug candidate, GMI-1359, that simultaneously targets both E-selectin and a chemokine receptor known as CXCR4. In the fourth quarter of 2019, we initiated a Phase 1b trial of GMI-1359 in hormone receptor positive breast cancer patients whose tumors have spread to bone, and the first patient was dosed in January 2020. We are also advancing other preclinical-stage programs, including small-molecule glycomimetic compounds that inhibit the protein galectin-3, which we believe may have potential to be used for the treatment of fibrosis, cancer and cardiovascular disease.

We have financed our operations primarily through private placements of our securities, up-front and milestone payments under our license and collaboration agreements and the net proceeds from public offerings of common stock, including sales of common stock under at-the-market sales facilities with Cowen and Company LLC, or Cowen. We have no approved drugs currently available for sale, and substantially all of our revenue to date has been revenue from up-front and milestone payments under license and collaboration agreements.

Since inception, we have incurred significant operating losses. We had an accumulated deficit of $338.1 million as of June 30, 2021 and we expect to continue to incur significant expenses and operating losses over at least the next several years. Our net losses may fluctuate significantly from quarter to quarter and year to year, depending on the timing of our clinical trials and our expenditures on other research and development activities. We anticipate that our expenses will increase substantially as we:

- initiate and conduct our planned clinical trials of uproleselan, GMI-1359 and GMI-1687, including fulfilling our funding and supply commitments related to the clinical trial of uproleselan being conducted in collaboration with NCI;
- conduct NDA-enabling activities related to manufacture, toxicology and clinical pharmacology for our product candidates;
- manufacture additional uproleselan drug supplies for validation and prepare for commercialization;

- 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 drug candidates for which we may obtain regulatory approval;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, quality control, regulatory and scientific personnel;
- maintain sufficient level of insurance including product liability and directors, officers and corporate liability insurance policies; 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. We may obtain additional financing in the future through the issuance of our common stock, through other equity or debt financings, potentially including the use of our at-the-market sales facility with Cowen, 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. For example, the current global COVID-19 pandemic presents material uncertainty and its disruption of the capital markets may have a material adverse impact on our ability to raise additional capital if we decide to do so. Although it is difficult to predict future liquidity requirements, we believe that our existing cash and cash equivalents will be sufficient to fund our operations into the fourth quarter of 2022. 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.

Impact of COVID-19 on Our Business

The imposition of “lockdown,” “social distancing” and “shelter in place” directives by state and federal governments in the United States as well as governments in other regions of the world in response to the COVID-19 pandemic, including in locations in which our Phase 3 clinical trial of uproleselan is being conducted, resulted in slowed clinical site initiation, patient recruitment and enrollment rates early in the pandemic. Enrollment rates have returned to forecasted rates since the beginning of the lockdowns. However, COVID-19 infection rates continue to fluctuate, which could negatively affect enrollment going forward. We cannot at this time fully assess the effect of the COVID-19 pandemic on our continued enrollment and whether the pandemic would potentially materially adversely impact the timing of completion of enrollment of our Phase 3 clinical trial. We continue to closely monitor the COVID-19 situation and any potential impact to our planned activities.

We have also implemented business continuity plans designed to address and mitigate the impact of the COVID-19 pandemic on our employees and our business. While to date we have experienced limited impacts beyond the earlier delays in recruitment in our ongoing uproleselan Phase 3 clinical trial, given the global economic slowdown, the overall disruption of global healthcare systems and the other risks and uncertainties associated with the pandemic, our business, financial condition, results of operations and growth prospects could be materially adversely affected. We continue to closely monitor the COVID-19 situation as we evolve our business continuity plans and response strategy. In March 2020, our workforce transitioned to working remotely in accordance with federal and state declarations. We have partially reopened to allow certain employees to return to the office based on a phased approach that is consistent with federal and state guidelines, with a focus on employee safety and optimal work environment.

Our Collaboration and License Agreements

Apollomics

In January 2020, we entered into an exclusive collaboration and license agreement with Apollomics (Hong Kong) Limited, or Apollomics, for the development and commercialization of uproleselan and GMI-1687 in Mainland China, Hong Kong, Macau and Taiwan, also known as Greater China. Under the terms of the agreement, Apollomics will be responsible for clinical development and commercialization in Greater China. We will also collaborate with Apollomics

to advance the preclinical and clinical development of GMI-1687. We received an upfront cash payment of $9.0 million and in September 2020 received a $1.0 million development milestone payment. Subject to the terms of the agreement, we will be eligible to receive potential further milestone payments totaling approximately $179.0 million, as well as tiered royalties ranging from the high single digits to 15%, as a percentage of net sales. Apollomics will be responsible for all costs related to development, regulatory approvals, and commercialization activities for uproleselan and GMI-1687 in Greater China, and we and Apollomics expect to enter into clinical and commercial supply agreements with respect to our provision of uproleselan and GMI-1687 to Apollomics. We retain all rights for both compounds in the rest of the world.

In September 2020, the China National Medical Products Administration (NMPA) Center for Drug Evaluation (CDE) granted IND approval for uproleselan (APL-106) enabling the initiation of a Phase 1 pharmacokinetics and tolerability study and includes acceptance of a Phase 3 bridging study of APL-106 in combination with chemotherapy in relapsed/refractory AML. In January 2021, APL-106 was granted Breakthrough Therapy Designation from the China NMPA CDE for the treatment of relapsed/refractory AML.

In June 2020, we entered into a clinical supply agreement with Apollomics under which we will manufacture and supply uproleselan product to Apollomics at agreed upon prices. Apollomics has the option to begin manufacture after appropriate material transfer requirements are met. During the six months ended June 30, 2021, we recognized $1.1 million in revenue from the sale of clinical supplies to Apollomics under the clinical supply agreement.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses in our financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to our revenue recognition, accrued research and development expenses, stock-based compensation expense and income taxes. We base our estimates on historical experience, known trends and events and various other factors that we believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other resources. Actual results may differ from these 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. For a description of our critical accounting policies, please see the disclosures in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2020. There have not been any material changes to our critical accounting policies since December 31, 2020.

Components of Operating Results

Revenue

To date, we have not generated any revenue from the sale of our drug candidates and do not expect to generate any revenue from the sale of drugs in the near future. Substantially all of our historical revenue consisted of upfront and milestone payments under license and collaboration agreements.

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. Our research and development expenses have related primarily to the development of rivipansel, uproleselan and our other drug candidates.

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.

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 uproleselan, GMI-1359 and our other drug candidates into and 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:

- 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, which could be lengthened as a result of the ongoing COVID-19 pandemic;
- 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, fees for accounting and consulting services and corporate insurance premiums. We anticipate that our general and administrative expenses will increase in the future to support our continued research and development activities.

Interest Income

Interest income consists of interest income earned on our cash and cash equivalents.

Results of Operations for the Three and Six Months Ended June 30, 2021 and 2020

The following tables set forth our results of operations for the three and six months ended June 30, 2021 and 2020:

	Three Months Ended June 30,		Increase/Decrease	
(in thousands)	**2021**	**2020**		
Revenue	$ —	$ —	$ —	NA
Costs and expenses:				
Research and development expense	10,167	9,871	296	3 %
General and administrative expense	4,237	4,235	2	0 %
Total costs and expenses	14,404	14,106	298	2 %
Loss from operations	(14,404)	(14,106)	(298)	2 %
Interest income	5	27	(22)	(81)%
Net loss and comprehensive loss	$ (14,399)	$ (14,079)	$ (320)	2 %

	Six Months Ended June 30,		Increase/Decrease	
(in thousands)	**2021**	**2020**		
Revenue	$ 1,056	$ 9,000	$ (7,944)	(88)%
Costs and expenses:				
Research and development expense	21,315	22,539	(1,224)	(5)%
General and administrative expense	8,425	8,675	(250)	(3)%
Total costs and expenses	29,740	31,214	(1,474)	(5)%
Loss from operations	(28,684)	(22,214)	(6,470)	29 %
Interest income	11	472	(461)	(98)%
Net loss and comprehensive loss	$ (28,673)	$ (21,742)	$ (6,931)	32 %

Revenue

During the six months ended June 30, 2021 and 2020, revenue was $1.1 million and $9.0 million, respectively, all of which was the result of payments received under the Apollomics Agreement for the development and commercialization of uproleselan and GMI-1687 in Greater China. During the six months ended June 30, 2021, we recognized $1.1 million in revenue from the sale of clinical supplies to Apollomics under the clinical supply agreement. In January 2020, we recognized $9.0 million in revenue from an upfront milestone payment.

Research and Development Expense

The following tables summarize our research and development expense by functional area for the three and six months ended June 30, 2021 and 2020:

	Three Months Ended June 30,		Increase/Decrease	
(in thousands)	**2021**	**2020**		
Clinical development	$ 4,469	$ 3,578	$ 891	25 %
Manufacturing and formulation	1,584	2,089	(505)	(24)%
Contract research services, consulting and other costs	696	440	256	58 %
Laboratory costs	492	436	56	13 %
Personnel-related	2,317	2,581	(264)	(10)%
Stock-based compensation	609	747	(138)	(18)%
Research and development expense	$ 10,167	$ 9,871	$ 296	3 %

(in thousands)	Six Months Ended June 30, 2021	2020	Increase/Decrease	
Clinical development	$ 9,122	$ 8,601	$ 521	6 %
Manufacturing and formulation	3,875	5,226	(1,351)	(26)%
Contract research services, consulting and other costs	1,239	1,007	232	23 %
Laboratory costs	1,005	1,010	(5)	(0)%
Personnel-related	4,776	5,212	(436)	(8)%
Stock-based compensation	1,298	1,483	(185)	(12)%
Research and development expense	$ 21,315	$ 22,539	$ (1,224)	(5)%

The following tables summarize our research and development expense by drug candidate for the three and six months ended June 30, 2021 and 2020:

(in thousands)	Three Months Ended June 30, 2021	2020	Increase/Decrease	
Uproleselan	$ 5,766	$ 5,708	$ 58	1 %
GMI-1359	180	69	111	161 %
Other research and development	1,295	766	529	69 %
Personnel-related and stock-based compensation	2,926	3,328	(402)	(12)%
Research and development expense	$ 10,167	$ 9,871	$ 296	3 %

(in thousands)	Six Months Ended June 30, 2021	2020	Increase/Decrease	
Uproleselan	$ 12,493	$ 13,869	$ (1,376)	(10)%
GMI-1359	414	173	241	139 %
Other research and development	2,334	1,802	532	30 %
Personnel-related and stock-based compensation	6,074	6,695	(621)	(9)%
Research and development expense	$ 21,315	$ 22,539	$ (1,224)	(5)%

Our research and development expense for the three months ended June 30, 2021 increased by $300,000 compared to the three months ended June 30, 2020 primarily due to increased clinical trial and development costs related to our ongoing global Phase 3 clinical trial of uproleselan in individuals with relapsed/refractory AML. The increase in clinical expenses was due to the higher enrollment in the trial in 2021 as compared to the same period in 2020. The increase was partially offset by a decrease in manufacturing and formulation relating to uproleselan.

Our research and development expense for the six months ended June 30, 2021 decreased by $1.2 million compared to the six months ended June 30, 2020 primarily due to a decrease in manufacturing and formulation costs relating to uproleselan. This decrease was offset by higher clinical trial and development costs related to our ongoing global Phase 3 clinical trial of uproleselan in individuals with relapsed/refractory AML.

General and Administrative Expense

The following tables summarize the components of our general and administrative expense for the three and six months ended June 30, 2021 and 2020:

(in thousands)	Three Months Ended June 30, 2021	2020	Increase/Decrease	
Personnel-related	$ 1,502	$ 1,602	$ (100)	(6)%
Stock-based compensation	953	1,015	(62)	(6)%
Legal, consulting and other professional expenses	1,649	1,471	178	12 %
Other	133	147	(14)	(10)%
General and administrative expense	$ 4,237	$ 4,235	$ 2	0 %

(in thousands)	Six Months Ended June 30, 2021	2020	Increase/Decrease	
Personnel-related	$ 3,107	$ 3,209	$ (102)	(3)%
Stock-based compensation	1,878	2,101	(223)	(11)%
Legal, consulting and other professional expenses	3,117	2,979	138	5 %
Other	323	386	(63)	(16)%
General and administrative expense	$ 8,425	$ 8,675	$ (250)	(3)%

General and administrative expenses remained consistent for the three and six months ended June 30, 2021 as compared to the same periods in 2020.

Interest Income

During the three and six months ended June 30, 2021 interest income decreased due to lower average cash balances and lower interest rates on those balances.

Liquidity and Capital Resources

Sources of Liquidity

We have historically financed our operations primarily through public offerings and private placements of our capital stock, including sales agreements with Cowen, and upfront and milestone payments from our license and collaboration agreements. As of June 30, 2021, we had $118.9 million in cash and cash equivalents.

In October 2020, we filed a prospectus supplement to a shelf registration statement that we filed in May 2019 and entered into a new at-the-market sales agreement, or the 2020 Sales Agreement, with Cowen. Under the 2020 Sales Agreement, we may sell up to $100.0 million of our common stock registered under the shelf registration statement that we filed in May 2019. During the year ended December 31, 2020, we sold 1,024,760 shares of common stock under the 2020 Sales Agreement at a weighted average price of $3.74, for aggregate net proceeds of $3.7 million, after deducting commissions and offering expenses. During the six months ended June 30, 2021, we sold an additional 2,517,603 shares of common stock under the 2020 Sales Agreement at a weighted average price of $3.92, for aggregate net proceeds of $9.6 million, after deducting commissions and offering expenses. As of June 30, 2021, we have approximately $86.3 million remaining available to be sold the terms of the 2020 Sales Agreement. Subsequent to June 30, 2021, there have been no additional sales under the 2020 Sales Agreement.

We entered into a collaboration and license agreement with Apollomics in January 2020 and are potentially eligible to earn milestone payments and royalties under that agreement. In January 2020, Apollomics made an upfront payment to us of $9.0 million. We also received a non-refundable payment of $1.0 million in September 2020 as a clinical development milestone payment. Our ability to earn additional milestone payments and potential royalty payments and their timing will be dependent upon the outcome of Apollomics' activities and is therefore 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 uproleselan or our other drug candidates. We are also unable to predict when, if ever, material net cash inflows will commence from uproleselan or our other drug candidates. 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;
- launching commercial sales of drugs, if and when approved, whether alone or in collaboration with others; and
- obtaining and maintaining healthcare coverage and adequate reimbursement.

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 license agreement with Apollomics. Except for Apollomics' conditional obligations to make milestone and royalty payments to us under our license agreement, we do 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 our existing cash and cash equivalents will enable us to fund our operating expenses and capital expenditure requirements into the fourth quarter of 2022. 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

The following is a summary of our cash flows for the six months ended June 30, 2021 and 2020:

	Six Months Ended June 30,	
(in thousands)	**2021**	**2020**
Net cash provided by (used in):		
Operating activities	$ (27,737)	$ (18,052)
Investing activities	(8)	(15)
Financing activities	9,564	9,710
Net change in cash and cash equivalents	$ (18,181)	$ (8,357)

Operating Activities

Net cash used in operating activities for the six months ended June 30, 2021 and 2020 was primarily the result of ongoing costs associated with our uproleselan clinical development programs which includes costs for project support, investigator site start-up and administrative costs and patient enrollment fees. These cash expenses were offset by non-cash expenses for stock-based compensation, lease expense and depreciation, and for the six months ended June 30, 2020, the upfront and clinical development milestone payment of $9.0 million received from Apollomics.

Investing Activities

Net cash used in investing activities for the six months ended June 30, 2021 and 2020 was for computer, office and laboratory equipment.

Financing Activities

Net cash provided by financing activities during the six months ended June 30, 2021 primarily consisted of the net proceeds received from our at-the-market facility with Cowen of $9.6 million. Net cash provided by financing activities of $9.7 million during the six months ended June 30, 2020 consisted of the net proceeds received from our prior at-the-market facility with Cowen of $9.6 million and $136,000 in proceeds from stock option exercises.

Off-Balance Sheet Arrangements

During the three months ended June 30, 2021, we did not have, and we do not currently have, any off-balance sheet arrangements, as defined under SEC rules.

ITEM 3. 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 June 30, 2021 and December 31, 2020, we had cash and cash equivalents of $118.9 million and $137.0 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.

ITEM 4. CONTROLS AND PROCEDURES

(a) *Evaluation of Disclosure Controls and Procedures*

The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, refers to controls and procedures that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that such information is accumulated and communicated to a company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

In designing and evaluating our disclosure controls and procedures, management recognizes that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate

because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a control system, misstatements due to error or fraud may occur and not be detected.

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2021, the end of the period covered by this Quarterly Report on Form 10-Q. Based upon such evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of such date at the reasonable assurance level.

(b) *Changes in Internal Controls Over Financial Reporting*

There have not been any changes in our internal controls over financial reporting during our fiscal quarter ended June 30, 2021 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we are subject to litigation and claims arising in the ordinary course of business. 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, cash flows or financial condition.

ITEM 1A. RISK FACTORS

Our business is subject to risks and events that, if they occur, could adversely affect our financial condition and results of operations and the trading price of our securities. Our risk factors as of the date of this quarterly report on Form 10-Q have not changed materially from those described in "Part I, Item 1A. Risk Factors" of our Annual Report on Form 10-K for the fiscal year ended December 31, 2020, filed with the Securities and Exchange Commission on March 2, 2021.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 6. EXHIBITS

Exhibit No.	Document
3.1	Amended and Restated Certificate of Incorporation of the Registrant (incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-36177), filed with the Commission on January 15, 2014).
3.2	Amended and Restated Bylaws of the Registrant (incorporated herein by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-36177), filed with the Commission on January 15, 2014).
4.1	Specimen stock certificate evidencing shares of Common Stock (incorporated herein by reference to Exhibit 4.2 to Amendment No. 2 to the Registrant's Registration Statement on Form S-1 (File No. 333-191567), filed with the Commission on October 31, 2013).
10.1+*	Amended and Restated Executive Employment Agreement, effective as of February 19, 2021, by and between the Registrant and Eric Feldman.
31.1*	Certification of Principal Executive Officer under Section 302 of the Sarbanes-Oxley Act.
31.2*	Certification of Principal Financial Officer under Section 302 of the Sarbanes-Oxley Act.

Exhibit No.	Document
32.1**	Certifications of Principal Executive Officer and Principal Financial Officer under Section 906 of the Sarbanes-Oxley Act.
101.INS	XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the inline XBRL document)
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

+ Indicates management contract or compensatory plan.

* Filed herewith.

** These certifications are being furnished solely to accompany this quarterly report pursuant to 18 U.S.C. Section 1350, and are not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and are not to be incorporated by reference into any filing of the registrant, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

GLYCOMIMETICS, INC.

Date: August 5, 2021

By: /s/ Brian M. Hahn
Brian M. Hahn
Senior Vice President and Chief Financial Officer
(On behalf of the Registrant and as Principal Financial Officer)

AMENDED AND RESTATED
EXECUTIVE EMPLOYMENT AGREEMENT

This **AMENDED AND RESTATED EXECUTIVE EMPLOYMENT AGREEMENT** (the "***Agreement***") is entered into effective February 19, 2021 (the "***Effective Date***"), by and between Eric J. Feldman, M.D. ("***Executive***") and GlycoMimetics, Inc. (the "***Company***").

WHEREAS, the Company desires to continue to employ Executive to provide personal services to the Company, and Executive wishes to continue to be employed by the Company and provide personal services to the Company in return for certain compensation and benefits; and

WHEREAS, this Agreement amends, restates and supersedes in its entirety Executive's Executive Employment Agreement dated April 22, 2019.

Accordingly, in consideration of the mutual promises and covenants contained herein, the parties agree to the following:

1. EMPLOYMENT BY THE COMPANY.

1.1 Term. The term of employment hereunder will be for the four year period commencing on the Effective Date and ending on the fourth anniversary of the Effective Date, subject to termination prior thereto pursuant to Sections 5, 6, 7, 8 or 9 below. Unless the Company gives notice of its intent not to renew Executive's employment hereunder, or Executive gives written notice to the Company of Executive's determination not to renew Executive's service and employment hereunder, in any case at least one year prior to the fourth anniversary of the Effective Date, this Agreement, and Executive's employment by the Company hereunder, shall be renewed for one year from that anniversary. Thereafter, unless the Company or Executive gives written notice of determination not to renew at least one year prior to the next succeeding anniversary of the Effective Date, this Agreement shall be renewed for one year from that anniversary. The term "***Service Period***" shall mean the four year period provided for in this Section 1.1 and any extension thereof, or any shorter period resulting from any termination of service under Sections 5, 6, 7, 8 or 9 hereof.

1.2 Position. Executive will be assigned to the position of Chief Medical Officer and Senior Vice President of the Company. During the term of Executive's employment with the Company, Executive will devote Executive's best efforts and substantially all of Executive's business time and attention to the business of the Company.

1.3 Duties. Executive will report to the Chief Executive Officer and/or such other Company executives designated by the Chief Executive Officer, performing such duties as are normally associated with Executive's then current position and such duties as are assigned to Executive from time to time, subject to the oversight and direction of the Chief Executive Officer or any applicable designee. Executive shall perform Executive's duties under this Agreement principally out of the Company's Rockville, Maryland location, or such other location as assigned. In addition, Executive shall make such business trips to such places as may be necessary or advisable for the efficient operations of the Company.

1.4 Company Policies and Benefits. The employment relationship between the parties shall also be subject to the Company's personnel policies and procedures as they may be interpreted, adopted, revised or deleted from time to time in the Company's sole discretion. Executive will be eligible to participate on the same basis as similarly situated employees in the Company's benefit plans in effect from time to time during Executive's employment. All matters of eligibility for coverage or benefits under any benefit plan shall be determined in accordance with the provisions of such plan. The Company reserves the right to change, alter, or terminate any benefit plan in its sole discretion. Notwithstanding the foregoing, in the event that the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control.

1.5 Time to be Devoted to Service. Except for reasonable vacations, absences due to temporary illness, and activities that may be mutually agreed to by the parties, Executive shall devote Executive's entire time, attention and energies during normal business hours and such evenings and weekends as may be reasonably required for the discharge of Executive's duties to the business of the Company during the Service Period. During the Service Period, Executive will not be engaged in any other business activity, which, in the reasonable judgment of the Chairperson of the Board of Directors of the Company, conflicts with the duties of Executive hereunder, whether or not such activity is pursued for gain, profit or other pecuniary advantage. The Company further acknowledges and agrees that, subject to the prior written approval by a majority of the Board of Directors (which majority shall exclude Executive if Executive is a then current member of the Board of Directors) and consistent with the terms of the Employee Proprietary Information Agreement (as defined in Section 3 below), Executive may serve on the boards of directors and advisory boards of other companies provided that such service does not interfere with the performance of Executive's duties hereunder.

2. COMPENSATION.

2.1 Base Salary. Executive shall receive for Executive's services to be rendered hereunder an initial annualized base salary of $425,000.00, subject to review and adjustment from time to time by the Company in its sole discretion and payable subject to standard federal and state payroll withholding requirements in accordance with Company's standard payroll practices ("***Base Salary***").

2.2 Bonus. Beginning in 2021, Executive shall be eligible to be awarded an annual cash bonus pursuant to the Company's annual performance bonus plan ("***Bonus***"), with the initial target amount of such bonus equal to forty percent (40%) of Executive's Base Salary during the then current bonus year ("***Target Bonus***"), subject to review and adjustment from time to time by the Company in its sole discretion, payable subject to standard federal and state payroll withholding requirements. Whether or not Executive is awarded any Bonus will be dependent upon (a) the actual achievement by Executive and the Company of the applicable individual and corporate performance goals, as determined by the Board's Compensation Committee in its sole discretion, and (b) Executive's continuous performance of services to the Company through the date any Bonus is paid. The Bonus may be greater or lesser than the Target Bonus and may be zero. The annual period over which performance is measured for purposes of this bonus is January 1 through December 31. Any Bonus awarded pursuant to this Section 2.2 will be paid on or before March 15 of the year following the year for which it is

awarded. Executive must be employed on the date bonuses are paid in order to be eligible for any bonus. In the event of termination of Executive's employment, no bonus, prorated or otherwise, will be paid for the year in which termination occurs.

2.3 Expense Reimbursement. The Company will reimburse Executive for reasonable business expenses in accordance with the Company's standard expense reimbursement policy. For the avoidance of doubt, to the extent that any reimbursements payable to Executive are subject to the provisions of Section 409A of the Internal Revenue Code of 1986, as amended (the "***Code***"): (a) any such reimbursements will be paid no later than December 31 of the year following the year in which the expense was incurred, (b) the amount of expenses reimbursed in one year will not affect the amount eligible for reimbursement in any subsequent year, and (c) the right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

3. PROPRIETARY INFORMATION, INVENTIONS, NON-COMPETITION AND NON-SOLICITATION OBLIGATIONS. The parties hereto have entered into an Employee Confidential Information, Inventions, Non-Solicitation and Non-Competition Agreement attached hereto as Exhibit A (the "***Employee Proprietary Information Agreement***"), which may be amended by the parties from time to time without regard to this Agreement. The Employee Proprietary Information Agreement contains provisions that are intended by the parties to survive and do survive termination or expiration of this Agreement.

4. NO CONFLICT WITH EXISTING OBLIGATIONS. Executive represents that Executive's performance of all the terms of this Agreement and as an Executive of the Company do not and will not breach any agreement or obligation of any kind made prior to Executive's employment by the Company, including agreements or obligations Executive may have with other employers or entities for which Executive has provided services. Executive has not entered into, and Executive agrees that Executive will not enter into, any agreement or obligation, either written or oral, in conflict herewith.

5. TERMINATION DUE TO DEATH OR DISABILITY.

5.1 Death or Disability. If Executive dies while employed pursuant to this Agreement, then all obligations of the parties hereunder shall terminate immediately. If Executive is unable due to a physical or mental condition to perform the essential functions of his/her position with or without reasonable accommodation for ninety (90) consecutive days or for one-hundred and eighty (180) days in the aggregate during any twelve (12) month period or based on the written certification by two licensed physicians of the likely continuation of such condition for either such period (such condition being herein referred to as "***Disability***"), the Company, at its option, may terminate Executive's employment under this Agreement immediately upon giving Executive notice to that effect. This definition shall be interpreted and applied consistent with the Americans with Disabilities Act, the Family and Medical Leave Act, and other applicable law. Termination pursuant to this Section 5 is hereinafter referred to as a "***Death or Disability Termination***".

5.2 Substitution. The Board of Directors may designate another employee to act in Executive's place during any period of Executive's Disability during the Service Period.

Notwithstanding any such designation, Executive shall continue to receive Executive's Base Salary and benefits in accordance with Sections 1.4 and 2 of this Agreement until Executive becomes eligible for disability income under the Company's disability income insurance (if any) or until the termination of Executive's employment, whichever shall first occur.

5.3 Disability Income Payments. While receiving disability income payments under the Company's disability income insurance (if any), Executive shall not be entitled to receive any Base Salary, but shall continue to be eligible to participate in all other compensation and benefits in accordance with Sections 1.4 and 2 until the date of Executive's termination. Notwithstanding the foregoing and in accordance with the Company's benefit plans, Executive may be ineligible for coverage as an employee under the Company's group health insurance plan during the period of Executive's Disability, in which case continued coverage will be based on eligibility for COBRA or applicable state continuation coverage. All matters of eligibility for coverage or benefits under any benefit plan shall be determined in accordance with the provisions of such plan.

5.4 Verification of Disability. If any question shall arise as to whether during any period Executive is disabled through any illness, injury, accident or condition of either a physical or psychological nature so as to be unable to perform substantially all of Executive's duties and responsibilities hereunder, Executive may, and at the request of the Company shall, submit to a medical examination by one or more licensed physicians selected by the Company to whom Executive or Executive's guardian has no reasonable objection to determine whether Executive is so disabled and such determination shall for the purposes of this Agreement be conclusive of the issue. If such question shall arise and Executive shall fail to submit to such medical examination, the Company's determination of the issue shall be binding on Executive.

6. TERMINATION FOR CAUSE. The Company, after consultation with the Board of Directors of the Company, may terminate the employment of Executive hereunder at any time for "cause" (such termination being hereinafter referred to as a "***Termination for Cause***") by giving Executive notice of such termination as described in Section 9.5, and upon the giving of such notice termination shall take effect immediately. For the purpose of this Section 6, "***cause***" will mean that the Company has determined in its sole discretion that any of the following occurred: (a) Executive's breach of fiduciary duty or substantial misconduct with respect to the business and affairs of the Company or any subsidiary or affiliate thereof, (b) Executive's neglect of duties or failure to act which can reasonably be expected to materially adversely affect the business or affairs of the Company, the Company or any subsidiary or affiliate thereof, (c) Executive's material breach of this Agreement, or of any provision of the Employee Proprietary Information Agreement which, to the extent curable, is not cured within 15 days after written notice thereof is given to Executive, (d) the commission by Executive of an act involving moral turpitude or fraud, (e) Executive's conviction of any felony, or of any misdemeanor involving fraud, theft, embezzlement, forgery or moral turpitude, (f) other conduct by Executive that is materially harmful to the business or reputation of the Company, including but not limited to conduct found to be in violation of the Company's policies prohibiting harassment or discrimination, or (g) the expiration of this Agreement.

7. TERMINATION WITHOUT CAUSE. The Company, after consultation with the Board of Directors of the Company, may terminate the employment of Executive hereunder at any time without "cause" (such termination being hereinafter called a "***Termination Without Cause***") by giving Executive notice of such termination as described in Section 9.5. Executive's termination of employment under this Section 7 will take effect immediately upon the giving of such notice.

8. RESIGNATION BY EXECUTIVE.

8.1 Without Good Reason. Any resignation by Executive other than for Good Reason (as defined below) will be referred to hereinafter as a "***Resignation***". A Resignation will be deemed to be effective following notice under Section 9.5.

8.2 With Good Reason. Provided Executive has not previously been notified of the Company's intention to terminate Executive's employment, Executive may resign from employment with the Company for Good Reason (as defined below) by giving the Company written notice of such termination in compliance with Section 9.5 and provided that such notice specifies: (i) the basis for termination; and (ii) the effective date of termination (such termination being hereinafter referred to as a "***Termination for Good Reason***"). For purposes of this Agreement, the term "***Good Reason***" shall mean any of the following without Executive's prior written consent: (w) any material diminution of Executive's duties or responsibilities hereunder (except in each case in connection with a Termination for Cause or as a result of Executive's death or Disability), or, the assignment to Executive of duties or responsibilities that are materially inconsistent with Executive's then position; *provided*, *however*, that the acquisition of the Company and subsequent conversion of the Company to a division or unit of the acquiring company will not by itself result in a diminution of Executive's duties or responsibilities; (x) a material reduction in Executive's Base Salary, which the parties agree is a reduction of at least 10% of Executive's Base Salary (unless pursuant to a salary reduction program applicable generally to the Company's similarly-situated employees); (y) any material breach of the Agreement by the Company which is not cured within 15 business days after written notice thereof is given to the Company; or (z) a relocation of Executive from the Company's principal office to a location more than 35 miles from the location of the Company's principal office, other than on required travel by Executive on the Company's business or on a temporary basis not to exceed a period equal to two calendar months; *provided*, *however*, that any such termination by Executive shall only be deemed for Good Reason pursuant to this definition if: (1) Executive gives the Company written notice of intent to terminate for Good Reason within 30 days following the first occurrence of the condition(s) that Executive believes constitute(s) Good Reason, which notice shall describe such condition(s); (2) the Company fails to remedy such condition(s) within 30 days following receipt of the written notice (the "***Cure Period***"); (3) the Company has not, prior to receiving such notice from Executive, already informed Executive that Executive's employment with the Company is being terminated; and (4) Executive voluntarily terminates Executive's employment within 30 days following the end of the Cure Period.

9. EFFECT OF TERMINATION OF EMPLOYMENT.

9.1 Resignation, Death or Disability Termination, or a Termination for Cause. Upon the termination of Executive's employment hereunder pursuant to a Resignation, Death or Disability Termination, or a Termination for Cause, neither Executive nor Executive's beneficiary or estate will receive severance payments, or any other severance compensation or benefit, or have any further rights or claims against the Company, its affiliates, or its subsidiaries under this Agreement except to receive:

(a) the accrued but unpaid portion of Executive's then current Base Salary, computed on a pro-rata basis to the date of such termination, subject to the Company's standard payroll policies;

(b) all compensation and benefits payable to Executive based on Executive's then current participation in any compensation or benefit plan, program or arrangement through the date of termination; and

(c) reimbursement for any expenses for which Executive shall not have theretofore been reimbursed as provided in the Company's standard expense reimbursement policy.

9.2 Termination Without Cause or for Good Reason (Other Than Change in Control). Upon the termination of Executive's employment hereunder pursuant to a Termination Without Cause or a Termination for Good Reason (other than in connection with a Change in Control (as defined below)), neither Executive nor Executive's beneficiary or estate will have any further rights or claims against the Company, its affiliates or its subsidiaries under this Agreement except to receive:

(a) a termination payment equal to that provided for in Section 9.1 hereto; and

(b) if Executive executes a general release in favor of the Company, substantially in the form attached hereto as Exhibit B (the "***Release***"), and subject to Section 9.2(c) (the date that the Release becomes effective and may no longer be revoked by Executive is referred to as the "***Release Date***"), then the Company shall pay to Executive the following severance benefits (such benefits referred to as "***Severance Benefits***"): (i) continuation of Executive's then current Base Salary for a period of twelve (12) months from the Release Date (such applicable period is referred to as the "***Severance Period***"), less applicable withholdings and deductions ("***Severance Pay***"), paid in equal installments beginning on the Company's first regularly scheduled payroll date that is at least sixty (60) days following the Release Date (the "***Severance Pay Commencement Date***"), with the remaining installments occurring on the Company's regularly scheduled payroll dates thereafter; provided, however, that on the Severance Pay Commencement Date, the Company will pay in a lump sum the aggregate amount of the Severance Pay that the Company would have paid Executive through such date had the payments commenced on the first regular payroll date following the Separation from Service (as defined below) through the Severance Pay Commencement Date, with the balance paid thereafter on the applicable schedule described above; and (ii) payment of the premiums of

Executive's group health insurance COBRA continuation coverage, including coverage for Executive's eligible dependents, for a maximum period of twelve (12) months following Executive's Termination Without Cause or a Termination for Good Reason (other than in connection with a Change in Control (as defined below)) (such period subject to the qualifications of this Section 9.2(b) referred to as "***COBRA Payment Period***"); *provided, however,* that (a) the Company shall pay premiums for Executive and Executive's eligible dependents only for coverage for which Executive and Executive's eligible dependents were enrolled immediately prior to the Termination Without Cause or Termination for Good Reason; (b) the Company's obligation to pay such premiums shall cease immediately upon Executive's eligibility for comparable group health insurance provided by a new employer of Executive or upon Executive no longer being eligible for COBRA during the COBRA Payment Period; and (c) the Company's obligation to pay such premiums shall be contingent on Executive's timely election of continued group health insurance coverage under COBRA. Vesting of any unvested stock options and/or other equity securities shall cease on the date of termination following Executive's Termination Without Cause or a Termination for Good Reason (other than in connection with a Change in Control (as defined below)). In addition, the Company's severance obligation shall be reduced by the amount of any salary received by Executive from another employer during the Severance Period. Executive agrees to inform the Company promptly if Executive obtains other employment during the Severance Period. Notwithstanding the foregoing, if at any time the Company determines, in its sole discretion, that the payment of the COBRA premiums would result in a violation of the nondiscrimination rules of Section 105(h)(2) of the Code or any statute or regulation of similar effect (including, without limitation, the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of providing the COBRA premiums, the Company will instead pay Executive, on the first day of each month of the remainder of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premiums for that month, subject to applicable tax withholdings and deductions (such amount, the "***Special Severance Payment***").

(c) To receive the Severance Benefits pursuant to Section 9.2(b), Executive's termination or resignation must constitute a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)) ("***Separation from Service***") and Executive must execute and allow the Release to become effective within 60 days of Executive's termination or resignation. Executive's ability to receive the Severance Benefits pursuant to Section 9.2(b) is further conditioned upon Executive: returning all Company property; complying with post-termination obligations under this Agreement and the Employee Proprietary Information Agreement, and complying with the Release including without limitation any non-disparagement and confidentiality provisions contained therein. The Severance Benefits provided to Executive pursuant to Section 9.2(b) are in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

(d) The damages (if any) caused to Executive by a Termination Without Cause or a Termination for Good Reason would be difficult to ascertain; therefore, the Severance Benefits for which Executive is eligible pursuant to Section 9.2(b) above in exchange for the Release is agreed to by the parties as liquidated damages, to serve as full compensation, and not a penalty.

9.3 Change in Control Severance Benefits.

(a) In the event that the Company (or any surviving or acquiring corporation) terminates Executive's employment for a Termination Without Cause or Executive resigns in connection with a Termination for Good Reason within 12 months following the effective date of a Change in Control ("***Change in Control Termination***"), and upon compliance with Section 9.2(c) above, Executive shall be eligible to receive the following Change in Control severance benefits instead of the Severance Benefits set forth in Section 9.2 above: (i) a lump-sum cash payment in an amount equal to Executive's annual Base Salary then in effect for a period of twelve (12) months, less applicable withholdings and deductions, paid on the 60th day following the Change in Control Termination; (ii) an amount equal to 1.0 times (1.0x) Executive's then current annual Target Bonus paid on the 60th day following the Change in Control Termination; and (iii) the Company (or any surviving or acquiring corporation) shall pay the premiums of Executive's group health insurance COBRA continuation coverage, including coverage for Executive's eligible dependents, during the twelve (12) months following a Change in Control Termination (such period subject to the qualifications of this Section 9.3(a) referred to as "***CIC COBRA Payment Period***"); *provided, however,* that (a) the Company (or any surviving or acquiring corporation) shall pay premiums for Executive and Executive's eligible dependents only for coverage for which Executive and Executive's eligible dependents were enrolled immediately prior to the Change in Control Termination; and (b) the Company's (or any surviving or acquiring corporation's) obligation to pay such premiums shall cease immediately upon Executive's eligibility for comparable group health insurance provided by a new employer of Executive or upon Executive no longer being eligible for COBRA during the CIC COBRA Payment Period; and (c) the Company's obligation to pay such premiums shall be contingent on Executive's timely election of continued group health insurance coverage under COBRA. Executive agrees that the Company's (or any surviving or acquiring corporation's) payment of health insurance premiums will satisfy the Company's obligations under COBRA for the period provided. No insurance premium payments will be made following the effective date of Executive's coverage by a health insurance plan of a subsequent employer. For the balance of the period that Executive is entitled to coverage under federal COBRA law, if any, Executive shall be entitled to maintain such coverage at Executive's own expense. Notwithstanding the foregoing, if at any time the Company determines, in its sole discretion, that the payment of the COBRA premiums would result in a violation of the nondiscrimination rules of Section 105(h)(2) of the Code or any statute or regulation of similar effect (including, without limitation, the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of providing the COBRA premiums, the Company will instead pay Executive, on the first day of each month of the remainder of the CIC COBRA Payment Period, the Special Severance Payment.

(b) To receive the payments in Section 9.3(a), Executive's termination or resignation must constitute a Separation from Service (as defined under Treasury Regulation Section 1.409A-1(h)) and Executive must execute and allow the Release to become effective within 60 days of Executive's termination or resignation. Executive's ability to receive benefits pursuant to Section 9.3(a) is further conditioned upon Executive: returning all Company property; complying with Executive's post-termination obligations under this Agreement and the Employee Proprietary Information Agreement, and complying with the Release including without limitation any non-disparagement and confidentiality provisions contained therein.

(c) In addition, notwithstanding anything contained in Executive's award agreements to the contrary, upon a Change in Control Termination Executive shall receive accelerated vesting of all then unvested shares of the Company's Common Stock subject to outstanding stock options, restricted stock units and any other equity incentive awards that Executive then may have, if any, provided, however, that unvested shares subject to Executive's outstanding stock options shall only accelerate if Executive executes the Release within the timeframe provided by the Company and Executive's stock options shall remain outstanding following the date of Executive's Change in Control Termination if and to the extent necessary to give effect to this Section 9.3(c) subject to earlier termination under the terms of the equity plan under which such stock options were granted and the original maximum term of the award (without regard to Executive's termination).

(d) As used in this Agreement, a "***Change in Control***" is defined as the first to occur of the following: (a) a sale, lease, exchange or other transfer in one transaction or a series of related transactions of all or substantially all of the assets of the Company (other than the transfer of the Company's assets to a majority-owned subsidiary corporation); (b) a merger or consolidation in which the Company is not the surviving corporation (unless the holders of the Company's outstanding voting stock immediately prior to such transaction own, immediately after such transaction, securities representing at least fifty percent (50%) of the voting power of the corporation or other entity surviving such transaction); (c) a reverse merger in which the Company is the surviving corporation but the shares of the Company's common stock outstanding immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise (unless the holders of the Company's outstanding voting stock immediately prior to such transaction own, immediately after such transaction, securities representing at least fifty percent (50%) of the voting power of the Company); or (d) any transaction or series of related transactions in which in excess of fifty percent (50%) of the Company's voting power is transferred. Notwithstanding the foregoing, to the extent that the Company determines that any of the payments or benefits under this Agreement that are payable in connection with a Change in Control constitute deferred compensation under Section 409A that may only be paid on a qualifying transaction (that is, they are not "exempt" under 409A), the foregoing definition of Change in Control shall apply only to the extent the transaction also meets the definition used for purposes of Treasury Regulation Section 1.409A-3(a)(5), that is, as defined under Treasury Regulation Section 1.409A-3(i)(5).

9.4 Parachute Taxes.

(a) If any payment or benefit Executive would receive from the Company or otherwise in connection with a Change of Control or other similar transaction ("***Payment***") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "***Excise Tax***"), then such Payment will be equal to the Reduced Amount. The "***Reduced Amount***" will be either (x) the largest portion of the Payment that would result in no portion of the Payment being subject to the Excise Tax, or (y) the largest portion, up to and including the total, of the Payment, whichever amount ((x) or (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in Executive's receipt of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the

Excise Tax. If a Reduced Amount will give rise to the greater after tax benefit, the reduction in the Payments will occur in the following order: (a) reduction of cash payments; (b) cancellation of accelerated vesting of equity awards other than stock options; (c) cancellation of accelerated vesting of stock options; and (d) reduction of other benefits paid to Executive. Within any such category of payments and benefits (that is, (a), (b), (c) or (d)), a reduction will occur first with respect to amounts that are not "deferred compensation" within the meaning of Section 409A and then with respect to amounts that are. In the event that acceleration of compensation from Executive's equity awards is to be reduced, such acceleration of vesting will be canceled, subject to the immediately preceding sentence, in the reverse order of the date of grant.

(b) The registered public accounting firm engaged by the Company for general audit purposes as of the day prior to the effective date of the event described in Section 280G(b)(2)(A)(i) of the Code will perform the foregoing calculations. If the registered public accounting firm so engaged by the Company is serving as accountant or auditor for the acquirer or is otherwise unable or unwilling to perform the calculations, the Company will appoint a nationally recognized firm that has expertise in these calculations to make the determinations required hereunder. The Company will bear all expenses with respect to the determinations by such independent registered public accounting firm required to be made hereunder. The firm engaged to make the determinations hereunder will provide its calculations, together with detailed supporting documentation, to the Company and Executive within 30 calendar days after the date on which Executive's right to a Payment is triggered (if requested at that time by the Company or Executive) or such other time as reasonably requested by the Company or Executive. Any good faith determinations of the independent registered public accounting firm made hereunder will be final, binding and conclusive upon the Company and Executive.

9.5 Notice; Effective Date of Termination.

(a) Termination of Executive's employment pursuant to this Agreement shall be effective on the earliest of:

(i) immediately after the Company gives notice to Executive of Executive's Termination for Cause or Termination Without Cause, unless pursuant to Section 6(c) in which case 15 days after notice if not cured or unless the Company specifies a later date, in which case, termination shall be effective as of such later date;

(ii) immediately upon Executive's death;

(iii) immediately after the Company gives notice to Executive of Executive's termination on account of Executive's Disability, unless the Company specifies a later date, in which case, termination shall be effective as of such later date, *provided* that Executive has not returned to the full time performance of Executive's duties prior to such date;

(iv) 10 days after Executive gives written notice to the Company of Executive's Resignation; *provided* that the Company may set a termination date at any time between the date of notice and the date of resignation, in which case Executive's resignation shall be effective as of such other date. Executive will receive compensation through any required notice period; or

(v) the date set forth in Section 8.2 above for a Termination for Good Reason.

(b) In the event notice of a termination under subsections (a)(i), (iii) and (iv) is given orally, at the other party's request, the party giving notice must provide written confirmation of such notice within 5 business days of the request in compliance with the requirement of Section 10.1 below.

9.6 Cooperation With Company After Termination of Employment. Following termination of Executive's employment for any reason, Executive shall fully cooperate with the Company in all matters relating to the winding up of Executive's pending work including, but not limited to, any litigation in which the Company is involved, and the orderly transfer of any such pending work to such other employees as may be designated by the Company.

9.7 Application of Section 409A. It is intended that all of the benefits and payments under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Code Section 409A provided under Treasury Regulations 1.409A-1(b)(4) and 1.409A-1(b)(9), and this Agreement will be construed to the greatest extent possible as consistent with those provisions. If not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A, and incorporates by reference all required definitions and payment terms. For purposes of Code Section 409A (including, without limitation, for purposes of Treasury Regulation Section 1.409A-2(b)(2)(iii)), Executive's right to receive any installment payments under this Agreement (whether severance payments, reimbursements or otherwise) will be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder will at all times be considered a separate and distinct payment. Notwithstanding any provision to the contrary in this Agreement, if Executive is deemed by the Company at the time of Executive's Separation from Service to be a "specified employee" for purposes of Code Section 409A(a)(2)(B)(i), and if any of the payments upon Separation from Service set forth herein and/or under any other agreement with the Company are deemed to be "deferred compensation", then if delayed commencement of any portion of such payments is required to avoid a prohibited distribution under Code Section 409A(a)(2)(B)(i) and the related adverse taxation under Section 409A, the timing of the payments upon a Separation from Service will be delayed as follows: on the earlier to occur of (i) the date that is six months and one day after the effective date of Executive's Separation from Service, and (ii) the date of Executive's death (such earlier date, the "***Delayed Initial Payment Date***"), the Company will (A) pay to Executive a lump sum amount equal to the sum of the payments upon Separation from Service that Executive would otherwise have received through the Delayed Initial Payment Date if the commencement of the payments had not been delayed pursuant to this paragraph, and (B) commence paying the balance of the payments in accordance with the applicable payment schedules set forth above. No interest will be due on any amounts so deferred. To the extent that any severance payments or benefits payable to Executive pursuant to this Agreement are not otherwise exempt from the application of Code Section 409A, then, if the period during which Executive may consider and sign the Release spans two calendar years, the payment of severance will not be made or begin until the later calendar year.

10. GENERAL PROVISIONS.

10.1 Notices. Any notices required hereunder to be in writing shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by electronic mail or confirmed facsimile if sent during normal business hours of the recipient, and if not, then on the next business day, (c) 5 days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) 1 day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company, "Attention Chairman of the Board," at its primary office location and to Executive at Executive's address as listed on the Company payroll, or at such other address as the Company or Executive may designate by 10 days advance written notice to the other.

10.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provisions had never been contained herein.

10.3 Survival. Provisions of this Agreement which by their terms must survive the termination of this Agreement in order to effectuate the intent of the parties will survive any such termination, whether by expiration of the term, termination of Executive's employment, or otherwise, for such period as may be appropriate under the circumstances.

10.4 Waiver. If either party should waive any breach of any provisions of this Agreement, Executive or the Company shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

10.5 Complete Agreement. This Agreement constitutes the entire agreement between Executive and the Company with regard to the subject matter hereof. This Agreement is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter and supersedes any prior oral discussions or written communications and agreements. This Agreement is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in writing signed by Executive and an authorized officer of the Company. The parties have entered into a separate Employee Proprietary Information Agreement and have entered or may enter into separate agreements related to stock awards. These separate agreements govern other aspects of the relationship between the parties, have or may have provisions that survive termination of Executive's employment under this Agreement, may be amended or superseded by the parties without regard to this Agreement and are enforceable according to their terms without regard to the enforcement provision of this Agreement.

10.6 Further Assurances. Executive agrees to execute, acknowledge, seal and deliver such further assurances, documents, applications, agreements and instruments, and to

take such further actions, as the Company may reasonably request in order to accomplish the purposes of this Agreement.

10.7 **Counterparts**. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement.

10.8 **Headings**. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

10.9 **Successors and Assigns**. This Agreement is intended to bind and inure to the benefit of and be enforceable by Executive and the Company, and their respective successors, assigns, heirs, executors and administrators, except that Executive may not assign any of Executive's duties hereunder and may not assign any of Executive's rights hereunder without the written consent of the Company, which shall not be withheld unreasonably.

10.10 **Choice of Law**. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the law of the State of Maryland, without giving effect to choice of law principles. Executive and the Company hereby expressly consent to the personal jurisdiction and venue of the state and federal courts located in the State of Maryland for any claims or suits arising from or related to this Agreement.

[Signature page follows]

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Executive Employment Agreement effective as of the day and year first written above.

GLYCOMIMETICS, INC.	**EXECUTIVE**
/s/ Rachel K. King	/s/ Eric J. Feldman
(Signature)	*(Signature)*
By: Rachel K. King	By: Eric J. Feldman, M.D.
Title: Chief Executive Officer	

Exhibit A

Employee Proprietary Information Agreement

(see following pages)

Exhibit A to Amended and Restated Executive Employment Agreement

Exhibit B

Release Agreement

(see following pages)

Release Agreement

This Release Agreement ("***Release***") is made by and between GlycoMimetics, Inc. (the ***"Company"***) and Eric J. Feldman, M.D. (***"you"***). You and the Company entered into an Amended and Restated Employment Agreement effective February 19, 2021 (the "***Employment Agreement***"). You and the Company hereby further agree as follows:

1. A blank copy of this Release was attached to the Employment Agreement as Exhibit B.

2. Severance Payments. If your employment was terminated by the Company for a Termination Without Cause, a Termination for Good Reason, or a Change in Control Termination (as defined in the Employment Agreement) in accordance with Section 9 of the Employment Agreement, then in consideration for your execution, return and non-revocation of this Release, following the Release Date (as defined in Section 3 below) the Company will provide severance benefits to you as follows: [described benefits and payment schedule].

3. Release by You. In exchange for the payments and other consideration under this Release, to which you would not otherwise be entitled, and except as otherwise set forth in this Release, you hereby generally and completely release, acquit and forever discharge the Company, its parents and subsidiaries, and its and their officers, directors, managers, partners, agents, servants, employees, attorneys, shareholders, successors, assigns and affiliates (the "***Releasees***"), of and from any and all claims, liabilities, demands, causes of action, costs, expenses, attorneys fees, damages, indemnities and obligations of every kind and nature, in law, equity, or otherwise, both known and unknown, suspected and unsuspected, disclosed and undisclosed, arising out of or in any way related to agreements, events, acts or conduct at any time prior to and including the execution date of this Release, including but not limited to: all such claims and demands directly or indirectly arising out of or in any way connected with your employment with the Company or the termination of that employment; claims or demands related to salary, bonuses, commissions, stock, stock options, or any other ownership interests in the Company, vacation pay, fringe benefits, expense reimbursements, severance pay, or any other form of compensation; claims pursuant to any federal, state or local law, statute, or cause of action; tort law; or contract law (individually a "***Claim***" and collectively "***Claims***"). The Claims you are releasing and waiving in this Release include, but are not limited to, any and all Claims that the Company, its parents and subsidiaries, and its and their respective officers, directors, agents, servants, employees, attorneys, shareholders, successors, assigns or affiliates:

- has violated its personnel policies, handbooks, contracts of employment, or covenants of good faith and fair dealing;

- has discriminated against you on the basis of age, race, color, sex (including sexual harassment), national origin, ancestry, disability, religion, sexual orientation, marital status, parental status, source of income, entitlement to benefits, any union activities or other protected category in violation of any local, state or federal law, constitution, ordinance, or regulation, including but not limited to: the Age Discrimination in Employment Act, as amended ("ADEA"); Title VII of the Civil Rights Act of 1964, as amended; 42 U.S.C. § 1981, as amended; the Civil Rights Act of 1866; the Fair Employment Practice Act of Maryland, Md. Code Ann., State Government, Title 20; the Worker Adjustment Retraining and Notification Act; the Equal Pay Act; the

Americans With Disabilities Act; the Family Medical Leave Act; the Occupational Safety and Health Act; the Immigration Reform and Control Act; the Uniform Services Employment and Reemployment Rights Act of 1994, as amended; Section 510 of the Employee Retirement Income Security Act; and the National Labor Relations Act;

· has violated any statute, public policy or common law (including but not limited to claims for retaliatory discharge; negligent hiring, retention or supervision; defamation; intentional or negligent infliction of emotional distress and/or mental anguish; intentional interference with contract; negligence; detrimental reliance; loss of consortium to you or any member of your family and/or promissory estoppel).

Notwithstanding the foregoing, you are not releasing any right of indemnification you may have for any liabilities arising from your actions within the course and scope of your employment with the Company or within the course and scope of your role as a member of the Board of Directors and/or officer of the Company. Also excluded from this Release are any claims which cannot be waived by law, including, without limitation, any rights you may have under applicable workers' compensation laws and your right, if applicable, to file or participate in an investigative proceeding of any federal, state or local governmental agency. Nothing in this Release shall prevent you from filing, cooperating with, or participating in any proceeding or investigation before the Equal Employment Opportunity Commission, United States Department of Labor, the National Labor Relations Board, the Occupational Safety and Health Administration, the Securities and Exchange Commission or any other federal government agency, or similar state or local agency (***"Government Agencies"***), or exercising any rights pursuant to Section 7 of the National Labor Relations Act. You further understand this Release does not limit your ability to voluntarily communicate with any Government Agencies or otherwise participate in any investigation or proceeding that may be conducted by any Government Agency, including providing documents or other information, without notice to the Company. While this Release does not limit your right to receive an award for information provided to the Securities and Exchange Commission, you understand and agree that, you are otherwise waiving, to the fullest extent permitted by law, any and all rights you may have to individual relief based on any Claims that you have released and any rights you have waived by signing this Release. If any Claim is not subject to release, to the extent permitted by law, you waive any right or ability to be a class or collective action representative or to otherwise participate in any putative or certified class, collective or multi-party action or proceeding based on such a Claim in which any of the Company Parties is a party. This Release does not abrogate your existing rights under any Company benefit plan or any plan or agreement related to equity ownership in the Company; however, it does waive, release and forever discharge Claims existing as of the date you execute this Release pursuant to any such plan or agreement.

You are waiving, however, your right to any monetary recovery should any governmental agency or entity, such as the EEOC or the DOL, pursue any claims on your behalf. You acknowledge that you are knowingly and voluntarily waiving and releasing any rights you may have under the ADEA, as amended. You also acknowledge that (i) the consideration given to you in exchange for the waiver and release in this Release is in addition to anything of value to which you were already entitled, and (ii) that you have been paid for all time worked, have received all the leave, leaves of absence and leave benefits and protections for which you are eligible, and have not suffered any on-the-job injury for which you have not already filed a claim. You further acknowledge that you have been advised by this writing that: (a) your waiver and release do not apply to any rights or claims that may arise after the execution date of this Release; (b) you have been advised hereby that you have the right to consult with an attorney

prior to executing this Release; (c) you have twenty-one (21) days **[in the event of a group release 21 days becomes 45 days]** to consider this Release (although you may choose to voluntarily execute this Release earlier); (d) you have seven (7) days following your execution of this Release to revoke the Release; and (e) this Release shall not be effective until the date upon which the revocation period has expired unexercised, which shall be the eighth day after this Release is executed by you provided the Company has also executed the Release on or before that date (the "***Release Date***").

4. Return of Company Property. Within ten (10) days of the effective date of the termination of employment, you agree to return to the Company all Company documents (and all copies thereof) and other Company property then in existence that you have had in your possession at any time, including, but not limited to, Company files, notes, drawings, records, business plans and forecasts, financial information, specifications, computer-recorded information, tangible property (including, but not limited to, computers), credit cards, entry cards, identification badges and keys; and, any materials of any kind that contain or embody any proprietary or confidential information of the Company (and all reproductions thereof). **Receipt of the Severance described in paragraph 2 of this Release is expressly conditioned upon return of all such Company Property.**

5. Confidentiality. The provisions of this Release will be held in strictest confidence by you and will not be publicized or disclosed in any manner whatsoever; *provided, however,* that: (a) you may disclose this Release in confidence to your immediate family; (b) you may disclose this Release in confidence to your attorney, accountant, auditor, tax preparer, and financial advisor; and (c) you may disclose this Release insofar as such disclosure may be required by law. Notwithstanding the foregoing, nothing in this Release shall limit your right to voluntarily communicate with the Equal Employment Opportunity Commission, United States Department of Labor, the National Labor Relations Board, the Securities and Exchange Commission, other federal government agency or similar state or local agency or to discuss the terms and conditions of your employment with others to the extent expressly permitted by Section 7 of the National Labor Relations Act.

6. Proprietary Information, Inventions, Non-Competition and Non-Solicitation Obligations. Both during and after your employment you acknowledge your continuing obligations under your Employee Confidential Information, Inventions, Non-Solicitation and Non-Competition Agreement ("***Employee Proprietary Information Agreement***") not to use or disclose any confidential or proprietary information of the Company and to refrain from certain solicitation and competitive activities. Confidential information that is also a "trade secret," as defined by law, may be disclosed (A) if it is made (i) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. In addition, in the event that you file a lawsuit for retaliation by the Company for reporting a suspected violation of law, you may disclose the trade secret to your attorney and use the trade secret information in the court proceeding, if you: (A) file any document containing the trade secret under seal; and (B) do not disclose the trade secret, except pursuant to court order.

7. [Note: The Company may, in its discretion, elect to include this provision] Non-Disparagement. Both you and the Company agree not to disparage the other party, and the other party's officers, directors, employees, shareholders and agents, in any manner likely to be harmful to them or their business, business reputation or personal reputation; provided that both you and the Company will respond accurately and fully to any question, inquiry or request for

information when required by legal process. The Company's obligations under this Section are limited to company representatives with knowledge of this provision. Notwithstanding the foregoing, nothing in this Release shall limit your right to voluntarily communicate with the Equal Employment Opportunity Commission, United States Department of Labor, the National Labor Relations Board, the Securities and Exchange Commission, other federal government agency or similar state or local agency or to discuss the terms and conditions of your employment with others to the extent expressly permitted by Section 7 of the National Labor Relations Act.

8. No Admission. This Release does not constitute an admission by the Company of any wrongful action or violation of any federal, state, or local statute, or common law rights, including those relating to the provisions of any law or statute concerning employment actions, or of any other possible or claimed violation of law or rights.

9. Breach. You agree that upon any material breach of this Release you will forfeit all amounts paid or owing to you under this Release. Further, you acknowledge that it may be impossible to assess the damages caused by your material violation of the terms of paragraphs 4, 5, 6, and 7 of this Release and further agree that any threatened or actual material violation or breach of those paragraphs of this Release will constitute immediate and irreparable injury to the Company. You therefore agree that any such breach of this Release is a material breach of this Release, and, in addition to any and all other damages and remedies available to the Company upon your breach of this Release, the Company shall be entitled to an injunction to prevent you from violating or breaching this Release.

10. Miscellaneous. This Release, together with your Employee Proprietary Information Agreement, constitute the complete, final and exclusive embodiment of the entire agreement between you and the Company with regard to this subject matter. It is entered into without reliance on any promise or representation, written or oral, other than those expressly contained herein, and it supersedes any other such promises, warranties or representations. This Release may not be modified or amended except in a writing signed by both you and a duly authorized officer of the Company. This Release will bind the heirs, personal representatives, successors and assigns of both you and the Company, and inure to the benefit of both you and the Company, their heirs, successors and assigns. If any provision of this Release is determined to be invalid or unenforceable, in whole or in part, this determination will not affect any other provision of this Release and the provision in question will be modified by the court so as to be rendered enforceable. This Release will be deemed to have been entered into and will be construed and enforced in accordance with the laws of the State of Maryland as applied to contracts made and performed entirely within the State of Maryland.

[Signature page follows]

GLYCOMIMETICS, INC.

By: _____ _____
Date

EXECUTIVE

_____ _____
Eric J. Feldman, M.D. Date

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Rachel K. King, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended June 30, 2021 of GlycoMimetics, Inc. (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 5, 2021

/s/ Rachel K. King
Rachel K. King
Chief Executive Officer
(principal executive officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Brian M. Hahn, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended June 30, 2021 of GlycoMimetics, Inc. (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 5, 2021

/s/ Brian M. Hahn
Brian M. Hahn
Senior Vice President and Chief Financial Officer
(principal financial officer)

Exhibit 32.1

CERTIFICATIONS OF
PRINCIPAL EXECUTIVE OFFICER AND PRINCIPAL FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Rachel K. King, Chief Executive Officer of GlycoMimetics, Inc. (the "Company"), and Brian M. Hahn, Chief Financial Officer of the Company, each hereby certifies that, to the best of his or her knowledge:

1. The Company's Quarterly Report on Form 10-Q for the period ended June 30, 2021, to which this Certification is attached as Exhibit 32.1 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, the undersigned have set their hands hereto as of the 5th day of August 2021.

/s/ Rachel K. King	/s/ Brian M. Hahn
Rachel K. King	Brian M. Hahn
Chief Executive Officer	Senior Vice President and Chief Financial Officer

* This certification accompanies the Periodic Report to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of GlycoMimetics, Inc. under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Periodic Report), irrespective of any general incorporation language contained in such filing.