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, 2020

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 July 30, 2020 was 47,724,731.

GLYCOMIMETICS, INC.

INDEX TO FORM 10-Q

	PAGE
PART I. FINANCIAL INFORMATION	
Item 1. Financial Statements	3
Balance Sheets as of June 30, 2020 (unaudited) and December 31, 2019	3
Unaudited Statements of Operations and Comprehensive Loss for the three and six months ended June 30, 2020 and 2019	4
Unaudited Statements of Stockholders' Equity for the three and six months ended June 30, 2020 and 2019	5
Unaudited Statements of Cash Flows for the six months ended June 30, 2020 and 2019	6
Notes to Unaudited Financial Statements	7
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	19
Item 3. Quantitative and Qualitative Disclosures about Market Risk	30
Item 4. Controls and Procedures	30
PART II. OTHER INFORMATION	
Item 1. Legal Proceedings	31
Item 1A. Risk Factors	31
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	34
Item 6. Exhibits	35
Signatures	36

Part I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

GLYCOMIMETICS, INC.
Balance Sheets

	June 30, 2020 (Unaudited)	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 149,844,590	$ 158,201,441
Prepaid expenses and other current assets	3,513,405	4,326,322
Total current assets	153,357,995	162,527,763
Property and equipment, net	708,159	822,920
Prepaid research and development expenses	1,560,607	1,560,607
Deposits	52,320	52,320
Operating lease right-of-use asset	2,673,656	3,006,069
Total assets	$ 158,352,737	$ 167,969,679
Liabilities & stockholders' equity		
Current liabilities:		
Accounts payable	$ 1,371,308	$ 1,435,660
Accrued expenses	7,479,793	8,710,790
Operating lease liabilities	850,188	804,126
Total current liabilities	9,701,289	10,950,576
Noncurrent accrued expenses	515,144	—
Noncurrent operating lease liabilities	2,383,808	2,818,516
Total liabilities	12,600,241	13,769,092
Stockholders' equity:		
Preferred stock; $0.001 par value; 5,000,000 shares authorized, no shares issued and outstanding at June 30, 2020 and December 31, 2019	—	—
Common stock; $0.001 par value; 100,000,000 shares authorized; 46,714,698 shares issued and outstanding at June 30, 2020; 43,466,933 shares issued and outstanding at December 31, 2019	46,713	43,465
Additional paid-in capital	425,890,066	412,599,772
Accumulated deficit	(280,184,283)	(258,442,650)
Total stockholders' equity	145,752,496	154,200,587
Total liabilities and stockholders' equity	$ 158,352,737	$ 167,969,679

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,	
	2020	2019	2020	2019
Revenue	$ —	$ —	$ 9,000,000	$ —
Costs and expenses:				
Research and development expense	9,870,813	13,065,359	22,539,073	24,838,025
General and administrative expense	4,234,917	3,750,610	8,674,677	7,111,058
Total costs and expenses	14,105,730	16,815,969	31,213,750	31,949,083
Loss from operations	(14,105,730)	(16,815,969)	(22,213,750)	(31,949,083)
Interest income	26,701	986,154	472,117	2,035,371
Net loss and comprehensive loss	$ (14,079,029)	$ (15,829,815)	$ (21,741,633)	$ (29,913,712)
Basic and diluted net loss per common share	$ (0.32)	$ (0.37)	$ (0.50)	$ (0.69)
Basic and diluted weighted-average number of common shares	43,801,251	43,183,010	43,688,420	43,174,989

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

GLYCOMIMETICS, INC.
Unaudited Statements of Stockholders' Equity

	Six Months Ended June 30, 2020				
	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
Issuance of common stock, net of issuance costs	3,126,709	3,127	9,571,010	—	9,574,137
Exercise of options	121,056	121	135,462	—	135,583
Stock-based compensation	—	—	3,583,822	—	3,583,822
Net loss	—	—	—	(21,741,633)	(21,741,633)
Balance at June 30, 2020	46,714,698	$ 46,713	$ 425,890,066	$ (280,184,283)	$ 145,752,496

	Six Months Ended June 30, 2019				
	Common Stock		Additional Paid-In	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance at December 31, 2018	43,160,751	$ 43,159	$ 405,972,075	$ (200,550,739)	$ 205,464,495
Exercise of options	32,439	33	106,288	—	106,321
Stock-based compensation	—	—	2,901,839	—	2,901,839
Net loss	—	—	—	(29,913,712)	(29,913,712)
Balance at June 30, 2019	43,193,190	$ 43,192	$ 408,980,202	$ (230,464,451)	$ 178,558,943

	Three Months Ended June 30, 2020				
	Common Stock		Additional Paid-In	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
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	5,607	—	5,612
Stock-based compensation	—	—	1,761,673	—	1,761,673
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

	Three Months Ended June 30, 2019				
	Common Stock		Additional Paid-In	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance at March 31, 2019	43,180,169	$ 43,179	$ 407,385,052	$ (214,634,636)	$ 192,793,595
Exercise of options	13,021	13	75,755	—	75,768
Stock-based compensation	—	—	1,519,395	—	1,519,395
Net loss	—	—	—	(15,829,815)	(15,829,815)
Balance at June 30, 2019	43,193,190	$ 43,192	$ 408,980,202	$ (230,464,451)	$ 178,558,943

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

GLYCOMIMETICS, INC.
Unaudited Statements of Cash Flows

	Six Months Ended June 30,	
	2020	2019
Operating activities		
Net loss	$ (21,741,633)	$ (29,913,712)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	135,872	141,631
Non-cash lease expense	332,413	302,843
Stock-based compensation expense	3,583,822	2,901,839
Changes in assets and liabilities:		
Prepaid expenses and other current assets	812,917	(34,547)
Accounts payable	(70,944)	363,167
Accrued expenses	(1,230,997)	844,026
Noncurrent accrued expenses	515,144	—
Operating lease liabilities	(388,646)	(347,744)
Net cash used in operating activities	(18,052,052)	(25,742,497)
Investing activities		
Purchases of property and equipment	(14,519)	(114,305)
Net cash used in investing activities	(14,519)	(114,305)
Financing activities		
Proceeds from issuance of common stock, net of issuance costs	9,574,137	—
Proceeds from exercise of stock options	135,583	106,321
Net cash provided by financing activities	9,709,720	106,321
Net change in cash and cash equivalents	(8,356,851)	(25,750,481)
Cash and cash equivalents, beginning of period	158,201,441	209,917,595
Cash and cash equivalents, end of period	$ 149,844,590	$ 184,167,114
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, 2020, statements of operations and comprehensive loss and stockholders' equity for the three and six months ended June 30, 2020 and 2019 and statements of cash flows for the six months ended June 30, 2020 and 2019 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, 2019 contained in the Company's Annual Report on Form 10-K filed with the SEC on February 28, 2020. 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, 2020 and its results of operations and changes in its stockholders' equity for the three and six months ended June 30, 2020 and 2019 and its cash flows for the six months ended June 30, 2020 and 2019. The December 31, 2019 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, 2020 and 2019 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, 2020 and December 31, 2019. The carrying value of cash held in money market funds of $147.8 million and $156.2 million as of June 30, 2020 and December 31, 2019, 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 a license agreement entered into during the six months ended June 30, 2020.

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 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.

Research and Development Costs (Including Accruals for Clinical Trial Expenses)

Except for payments made in advance of services, research and development costs are expensed as incurred. Research and development costs primarily consist of employee-related expenses, including salaries and benefits, expenses incurred under agreements with contract research organizations (CROs), investigative sites and consultants that conduct the Company's clinical trials, the cost of acquiring and manufacturing clinical trial materials, including costs incurred under agreements with contract manufacturing organizations (CMOs), and other allocated expenses, stock-based compensation expense, and costs associated with non-clinical activities and regulatory approvals.

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. Third-party clinical trial expenses include investigator fees, site and patient costs, CRO costs, and costs for central laboratory testing and data management. The accrual for site and patient costs includes inputs such as estimates of patient enrollment, patient cycles incurred, clinical site activations, 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. 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. Effective January 1, 2020, the Company bases the expected volatility on the historical volatility of the Company's publicly traded common stock. Prior to January 1, 2020, the Company utilized the historical volatilities of a peer group (e.g., several public entities of similar size, complexity, and stage of development), along with the Company's historical volatility since its initial public offering, to determine its expected volatility.

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:

	Three and Six Months Ended June 30,	
	2020	2019
Stock options and restricted stock units	6,429,701	5,073,149

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, 2020 and 2019, the Company's net loss equaled comprehensive net loss and, accordingly, no additional disclosure is presented.

Recently Issued Accounting Standards

Adopted Accounting Standards

In November 2018, the Financial Accounting Standard Board (FASB) issued Accounting Standards Update (ASU) No. 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606*. The Company adopted this update as of January 1, 2020. The amendment clarifies that certain transactions between collaborative arrangement participants should be accounted for as revenue under Topic 606 when the collaborative arrangement participant is a customer in the context of a unit of account. In those situations, all the guidance in Topic 606 should be applied, including recognition, measurement, presentation and disclosure requirements. The amendment also adds unit-of-account guidance in Topic 808 to align with the guidance in Topic 606 (that is, a distinct good or service) when an entity is assessing whether the collaborative arrangement or a part of the arrangement is within the scope of Topic 606. Lastly, the amendment requires that in a transaction with a collaborative arrangement participant that is not directly related to sales to third parties, presenting the transaction together with revenue recognized under Topic 606 is precluded if the collaborative arrangement participant is not a customer. The adoption of the standard had no effect on the Company's operating results, cash flows or financial position.

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, 2020	December 31, 2019
Prepaid research and development expenses	$ 3,105,222	$ 3,838,835
Other prepaid expenses	358,821	301,534
Other receivables	49,362	185,953
Prepaid expenses and other current assets	$ 3,513,405	$ 4,326,322

4. Property and Equipment

Property and equipment, net consists of the following:

	June 30, 2020	December 31, 2019
Furniture and fixtures	$ 345,712	$ 345,712
Laboratory equipment	1,417,952	1,409,526
Office equipment	16,755	11,085
Computer equipment	309,024	302,009
Leasehold improvements	616,133	616,133
Property and equipment	2,705,576	2,684,465
Less accumulated depreciation	(1,997,417)	(1,861,545)
Property and equipment, net	$ 708,159	$ 822,920

Depreciation expense was $67,681 and $71,191 for the three months ended June 30, 2020 and 2019, respectively, and $135,872 and $141,631 for the six months ended June 30, 2020 and 2019, respectively.

5. Accrued Expenses

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

	June 30, 2020	December 31, 2019
Accrued research and development expenses	$ 4,241,613	$ 5,149,697
Accrued bonuses	2,035,080	2,677,288
Accrued consulting and other professional fees	354,465	320,935
Accrued employee benefits	694,718	351,966
Other accrued expenses	153,917	210,904
Accrued expenses	$ 7,479,793	$ 8,710,790

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's one-time option to terminate the Lease effective as of October 31, 2020 also applies to the additional space.

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 is not reasonably certain of being exercised as of June 30, 2020.

- ***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, 2020, the weighted-average remaining lease term was 3.3 years. There were no additional operating leases entered into during the six months ended June 30, 2020.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Operating lease cost	$ 231,989	$ 232,036	$ 463,979	$ 464,026
Variable lease cost	144,009	84,723	305,955	176,481
Total operating lease cost	$ 375,998	$ 316,759	$ 769,934	$ 640,507
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	$ 260,489	$ 255,493	$ 520,211	$ 508,880

Maturities of lease liability due under these lease agreements as of June 30, 2020 were as follows:

	Operating Lease Obligation
July 1, 2020 - December 31, 2020	$ 530,979
2021	1,077,420
2022	1,104,356
2023	940,793
2024	—
Thereafter	—
Total	3,653,548
Present value adjustment	(419,552)
Present value of lease payments	$ 3,233,996

7. Stockholders' Equity

At-The-Market Sales Facility

On September 28, 2017, the Company entered into an at-the-market sales agreement (the September 2017 Sales Agreement) with Cowen and Company, LLC 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 quarter ended June 30, 2020, the Company issued and sold 3,126,709 shares of common stock under the at-the-market sales agreement. The shares were sold at a weighted average price per share of $3.16, for aggregate net proceeds of $9.6 million, after deducting commissions and offering expenses. There were no shares sold under the September 2017 Sales Agreement during the six months ended June 30, 2019. As of June 30, 2020, $70.1 million remained available to be sold under the terms of the September 2017 Sales Agreement. The shelf registration statement under which the shares to be sold under the September 2017 Sales Agreement are registered expires on October 6, 2020.

Subsequent to June 30, 2020, the Company has issued and sold an additional 1,010,033 shares of common stock under the September 2017 Sales Agreement at a weighted average price per share of $4.65, for aggregate net proceeds of $4.6 million, after deducting commissions and offering expenses.

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, 2020 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, 2019	382,337	$ 1.33	1.3	
Options exercised	(121,056)	1.12		
Options forfeited	—	—		
Outstanding, Vested and Exercisable as of June 30, 2020	261,281	1.43	1.0	$ 608

As of June 30, 2020, 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, 2020 and 2019 was $468,458 and $129,250, respectively, and total cash received for options exercised was $135,583 and $12,320 during the six months ended June 30, 2020 and 2019, 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. As of January 1, 2020, the number of shares of common stock that may be issued under the 2013 Plan was automatically increased by 1,304,007 shares, representing 3% of the total number of shares of common stock outstanding on December 31, 2019, increasing the number of shares of common stock available for issuance under the 2013 Plan to 6,466,823 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, 2020 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, 2019	4,399,606	$ 10.43	6.8	
Options granted	1,473,100	4.49		
Options exercised	—	—		
Options forfeited	(57,054)	9.33		
Outstanding as of June 30, 2020	5,815,652	8.93	7.1	$ 101
Vested or expected to vest as of June 30, 2020	5,815,652	8.93	7.1	$ 101
Exercisable as of June 30, 2020	3,318,444	9.69	5.7	$ —

As of June 30, 2020, there was $12,644,390 of total unrecognized compensation expense related to unvested options under the 2013 Plan that will be recognized over a weighted-average period of approximately 2.5 years. There were no options exercised under the 2013 Plan during the six months ended June 30, 2020. Total intrinsic value of the options exercised during the six months ended June 30, 2019 was $97,429 and total cash received for options exercised was $94,001 during the six months ended June 30, 2019. The total fair value of shares underlying options which vested in the six months ended June 30, 2020 and 2019 was $5,014,602 and $4,395,888, 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. As of June 30, 2020, there was $858,158 of total unrecognized compensation expense associated with outstanding RSU grants that will be recognized over a weighted-average period of approximately 1.2 years.

The following is a summary of RSU activity under the 2013 Plan for the six months ended June 30, 2020:

	Number of Shares Underlying RSUs	Weighted-Average Grant Date Fair Value
Unvested at December 31, 2019	324,550	$ 4.53
Granted	—	—
Forfeited	(12,382)	4.53
Vested	—	—
Unvested at June 30, 2020	312,168	4.53

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.

A summary of the Company's stock option activity under the Inducement Plan for the six months ended June 30, 2020 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, 2019	—	$ —	—	
Options granted	40,600	2.06		
Options exercised	—	—		
Options forfeited	—	—		
Outstanding as of June 30, 2020	40,600	2.06	9.8	$ 69
Vested or expected to vest as of June 30, 2020	40,600	2.06	9.8	$ 69
Exercisable as of June 30, 2020	—	—	—	$ —

As of June 30, 2020, there was $56,002 of total unrecognized compensation expense related to unvested options under the Inducement Plan that will be recognized over a weighted-average period of approximately 3.8 years. There were no options vested or exercised under the Inducement Plan during the six months ended June 30, 2020.

The weighted-average fair value of the options granted during the six months ended June 30, 2020 and 2019 was $3.19 per share and $7.20 per share, respectively, applying the Black-Scholes-Merton option pricing model utilizing the following weighted-average assumptions:

	Six Months Ended June 30,	
	2020	2019
Expected term	6.25 years	6.25 years
Expected volatility	84.39%	71.14%
Risk-free interest rate	1.45%	2.55%
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, 2020 and 2019:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Research and development expense	$ 747,006	$ 578,843	$ 1,483,037	$ 1,086,665
General and administrative expense	1,014,667	940,552	2,100,785	1,815,174
Total stock-based compensation expense	$ 1,761,673	$ 1,519,395	$ 3,583,822	$ 2,901,839

8. Income Taxes

The Company has not recorded any tax provision or benefit for the six months ended June 30, 2020 and 2019. 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, 2020 and December 31, 2019.

9. License and Collaboration Agreements

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.

Additionally, the Company and Apollomics entered into a manufacturing and 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. There were no Products delivered to Apollomics during the six months ended June 30, 2020.

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. 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.

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 scope and duration of the pandemic, government restrictions and other actions, including relief measures, 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 our Phase 3 clinical trial of uproleselan is being conducted, resulted in slowed clinical site initiation, patient recruitment and enrollment rates in April 2020. Enrollment rates more recently showed an encouraging upward trend. However, the COVID-19 infection rates continue to rise, especially in the United States, which could negatively effect 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 our 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, 2019, which are included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on February 28, 2020.

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 glycomimetics, which are 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 rare 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 compounds that inhibit binding with selectins, known as selectin antagonists, has historically been limited by the complexities of carbohydrate chemistry. We believe our expertise in carbohydrate chemistry enables us to design 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. We completed an initial Phase 1 trial in healthy volunteers for uproleselan, and in May 2017 we completed enrollment in a Phase 1/2 clinical trial in patients with either relapsed/refractory or de novo/secondary AML. In December 2018, at the annual meeting of the American Society of Hematology, or ASH, we presented clinical data from this Phase 1/2 clinical trial that showed high remission rates, improved overall survival and improved event-free survival, all compared to historical controls derived from third-party clinical trials evaluating treatment with standard chemotherapy.

In March 2018, we announced our design for a randomized, double-blind, placebo-controlled Phase 3 clinical trial to evaluate uproleselan in individuals with relapsed/refractory AML, which design is aligned with guidance received from the U.S. Food and Drug Administration, or FDA. Based on consultations with the FDA, the single pivotal trial is planned to enroll approximately 380 adult patients with relapsed or refractory AML at centers in the United States, Canada, Europe and Australia. We dosed the first patient in this trial in November 2018. The primary efficacy endpoint will be overall survival; importantly, the FDA has advised us that data on overall survival will not need to be censored for transplant in the primary efficacy analysis, meaning that patients who proceed to transplant will continue to be included as part of the survival analysis. All patients will be treated with standard chemotherapy of either MEC (mitoxantrone, etoposide and cytarabine) or FAI (fludarabine, cytarabine and idarubicin), with approximately one-half of the patients randomized to receive uproleselan in addition to chemotherapy. Patients receiving uproleselan will be dosed for one day prior to initiation of chemotherapy, twice a day through the chemotherapy regimen, and then for two days after the end of chemotherapy, which was the same regimen as in the Phase 1/2 trial. The dose regimen will be fixed, rather than weight-based, which we believe will simplify administration. We plan to offer up to three cycles of consolidation therapy in both arms of the trial for patients who achieve remission. We believe that multiple cycles of treatment in patients who respond may drive an even deeper response in patients treated with uproleselan. If this is the case, it could lengthen the duration of remission with potential for additional benefit on survival. Key secondary endpoints of the Phase 3 trial will include the incidence of severe mucositis and remission rate, which will be assessed in a hierarchical fashion which may provide supportive data.

Uproleselan received orphan drug designation from the FDA in May 2015 for the treatment of patients with AML. In June 2016, uproleselan received fast track designation from the FDA for the treatment of adult patients with relapsed or refractory AML and elderly patients aged 60 years or older with AML. In May 2017, uproleselan received Breakthrough Therapy designation from the FDA for the treatment of adult patients with relapsed or refractory AML. In May 2017, the European Commission, based on a favorable recommendation from the EMA Committee for Orphan Medicinal Products, granted orphan designation for uproleselan for the treatment of patients with AML. In June 2018, we received a response from the EMA to our request for scientific advice with respect to our Marketing Authorization Application, or MAA, development plan. Based on this guidance, we are conducting the global Phase 3 clinical trial and intend to pursue regulatory approval of uproleselan for the treatment of AML.

In May 2018, we signed a Cooperative Research and Development Agreement, or CRADA, with the National Cancer Institute, or NCI, part of the National Institutes of Health. Under the terms of the CRADA, we will collaborate with both the NCI and the Alliance for Clinical Trials in Oncology to conduct a Phase 2/3 randomized, controlled clinical trial testing the addition of uproleselan to a standard cytarabine/daunorubicin chemotherapy regimen (7&3) in older adults with previously untreated AML who are suitable for intensive chemotherapy. The primary endpoint will be overall survival, which is defined as the time from the date of randomization to death from any cause, with a planned interim analysis based on event-free survival after the first 250 patients have been enrolled in the trial. The full trial is expected to enroll approximately 670 patients. Under the terms of the CRADA, the NCI may also fund additional research, including clinical trials involving pediatric patients with AML as well as preclinical experiments and clinical trials evaluating alternative populations and chemotherapy regimens. We will supply uproleselan as well as provide financial support to augment data analysis and monitoring for the Phase 3 program. The trial opened for enrollment in early 2019 and enrolled the first patient in April 2019.

As a potential life-cycle extension to uproleselan, we have rationally designed an innovative antagonist of E-selectin, GMI-1687, that could be suitable for subcutaneous administration. When given by subcutaneous injection in animal models, GMI-1687 has been observed to have equivalent activity to uproleselan, but at an approximately 1,000-fold lower dose. 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 studies with GMI-1687 to support our planned submission of an investigational new drug application, or IND, to the FDA.

We are developing an additional drug candidate, GMI-1359, that simultaneously targets both E-selectin and a chemokine receptor known as CXCR4. Since E-selectin and CXCR4 are implicated in the retention of cancer cells in the bone and bone marrow, we believe that targeting both E-selectin and CXCR4 with a single compound could improve efficacy in the treatment of cancers that affect the bone and bone marrow, particularly solid tumors that have a propensity to metastasize to bone, such as breast and prostate cancer. We completed a Phase 1 randomized, double-blind,

placebo-controlled, single-dose escalation trial of GMI-1359 in healthy volunteers. In this trial, volunteer participants received a single injection of either GMI-1359 or placebo, after which they were evaluated for safety, tolerability and pharmacokinetics, or PK. This trial was conducted at a single site in the United States. GMI-1359 was generally well tolerated in this trial, with no participants experiencing serious adverse events. 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. The trial is being conducted at Duke University and will evaluate dose escalation as well as safety, PK and pharmacodynamics markers of biologic activity in these patients. In January 2020, the FDA granted GMI-1359 orphan drug designation and rare pediatric disease designation for the treatment of osteosarcoma, a rare cancer affecting approximately 900 adolescents each year in the United States. These designations are expected to make GMI-1359 eligible for priority review by the FDA.

In addition to our programs described above, we are also advancing other preclinical-stage programs. These programs include 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 previously developed another glycomimetic drug candidate, rivipansel, a pan-selectin antagonist for the potential treatment of vaso-occlusive crisis, or VOC, a debilitating and painful condition that occurs periodically throughout the life of a person with sickle cell disease, or SCD. Rivipansel received fast track designation from the FDA as well as orphan drug designation from the FDA in the United States and from the European Medicines Agency, or EMA, in the European Union. We entered into an exclusive license agreement with Pfizer Inc., or the Pfizer Agreement, for Pfizer to further develop, obtain regulatory approval and potentially commercialize rivipansel worldwide. Pfizer conducted a pivotal Phase 3 clinical trial to evaluate the efficacy and safety of rivipansel in patients aged six and older with SCD who were hospitalized for VOC and required treatment with intravenous opioids. The clinical trial did not meet its primary or key secondary efficacy endpoints. Pfizer terminated the Pfizer Agreement effective as of April 2020, resulting in the transfer of development and commercialization rights, including the investigational new drug (IND) application for rivipansel, back to us.

In June 2020, the Foundation for Sickle Cell Disease Research, or FSCDR, released an abstract that presented new data from a post hoc analysis of the Phase 3 clinical trial data set. The abstract showed that patients experiencing acute VOC requiring hospitalization who were treated with rivipansel within approximately 26 hours of the onset of pain in their crisis experienced a statistically significant improvement in the primary efficacy endpoint of time to readiness for discharge. Specifically, the analysis showed a median improvement in time to readiness for discharge compared to placebo of 56.3 hours (p=0.03, 0.58 HR). The abstract has been accepted for a poster presentation at the September 2020 meeting of the FSCDR. We intend to discuss this and other data with the FDA to determine possible next steps, if any, for this program in acute VOC.

We commenced operations in 2003, and our operations to date have been limited to organizing and staffing our company, business planning, raising capital, developing our glycomimetics platform, identifying potential drug candidates, undertaking preclinical studies and conducting, both alone and in collaboration with third parties, clinical trials of uproleselan, GMI-1359 and rivipansel. To date, 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, although we have received nominal amounts of revenue under research grants.

Since inception, we have incurred significant operating losses. We had an accumulated deficit of $280.2 million as of June 30, 2020, 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; 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, such as our recent collaboration with Apollomics. 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 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 in April 2020. Enrollment rates more recently showed an encouraging upward trend. However, the COVID-19 infection rates continue to rise, especially in the United States, which could negatively effect 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 are currently preparing plans to reopen our office to allow 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, subject to the terms of the agreement, will be eligible to receive potential milestone payments totaling approximately $180.0 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.

Pfizer

In October 2011, we entered into the Pfizer Agreement, under which we granted Pfizer an exclusive worldwide license to develop and commercialize products containing rivipansel for all fields and uses. Pfizer was required to use commercially reasonable efforts, at its expense, to develop, obtain regulatory approval for and commercialize rivipansel for SCD in the United States. On August 2, 2019, Pfizer announced that its pivotal Phase 3 clinical trial to evaluate the efficacy and safety of rivipansel in patients aged six and older with SCD who were hospitalized for a vaso-occlusive crisis and required treatment with intravenous opioids did not meet its primary or key secondary efficacy endpoints. Pfizer terminated the Pfizer Agreement, effective as of April 5, 2020, and we now hold all rights to the potential future development and commercialization of rivipansel. We did not earn any revenue or receive any payments from Pfizer during the six months ended June 30, 2020 or 2019 and will not be eligible to receive any future payments from Pfizer following the termination of the Pfizer Agreement.

University of Basel

We entered into a research services agreement, or the Research Agreement, with the University of Basel, or the University, for biological evaluation of selectin antagonists. While the scope of work under the Research Agreement ended in 2017, certain patents covering the rivipansel compound are subject to provisions of the Research Agreement. Under the terms of the Research Agreement, we owed the University 10% of any milestone and royalty payments received from Pfizer with respect to rivipansel. There were no payments due to the University for the six months ended June 30, 2020 or 2019, and as a result of the termination of the Pfizer Agreement, we do not expect to make any future payments to the University.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations 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, 2019. There have not been any material changes to our critical accounting policies since December 31, 2019.

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 has consisted of upfront and milestone payments under the agreements with Pfizer and Apollomics.

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 and fees for accounting and consulting services. We anticipate that our general and administrative expenses will increase in the future to support our continued research and development activities.

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, 2020 and 2019

The following tables set forth our results of operations for the three and six months ended June 30, 2020 and 2019:

(in thousands)	Three Months Ended June 30, 2020	2019	Period-to-Period Change
Revenue	$ —	$ —	$ —
Costs and expenses:			
Research and development expense	9,871	13,065	(3,194)
General and administrative expense	4,235	3,751	484
Total costs and expenses	14,106	16,816	(2,710)
Loss from operations	(14,106)	(16,816)	2,710
Interest income	27	986	(959)
Net loss and comprehensive loss	$ (14,079)	$ (15,830)	$ 1,751

(in thousands)	Six Months Ended June 30, 2020	2019	Period-to-Period Change
Revenue	$ 9,000	$ —	$ 9,000
Costs and expenses:			
Research and development expense	22,539	24,838	(2,299)
General and administrative expense	8,675	7,111	1,564
Total costs and expenses	31,214	31,949	(735)
Loss from operations	(22,214)	(31,949)	9,735
Interest income	472	2,035	(1,563)
Net loss and comprehensive loss	$ (21,742)	$ (29,914)	$ 8,172

Revenue

We recognized $9.0 million in revenue during the six months ended June 30, 2020 from the Apollomics Agreement for the development and commercialization of uproleselan and GMI-1687 in Greater China. There was no revenue recognized during the six months ended June 30, 2019.

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, 2020 and 2019:

(in thousands)	Three Months Ended June 30, 2020	2019	Period-to-Period Change
Clinical development	$ 3,578	$ 2,512	$ 1,066
Manufacturing and formulation	2,089	6,033	(3,944)
Contract research services, consulting and other costs	440	848	(408)
Laboratory costs	436	498	(62)
Personnel-related	2,581	2,595	(14)
Stock-based compensation	747	579	168
Research and development expense	$ 9,871	$ 13,065	$ (3,194)

(in thousands)	Six Months Ended June 30, 2020	2019	Period-to-Period Change
Clinical development	$ 8,601	$ 5,119	$ 3,482
Manufacturing and formulation	5,226	11,276	(6,050)
Contract research services, consulting and other costs	1,007	1,442	(435)
Laboratory costs	1,010	1,000	10
Personnel-related	5,212	4,914	298
Stock-based compensation	1,483	1,087	396
Research and development expense	$ 22,539	$ 24,838	$ (2,299)

The following tables summarize our research and development expense by drug candidate for the three and six months ended June 30, 2020 and 2019:

(in thousands)	Three Months Ended June 30, 2020	2019	Period-to-Period Change
Uproleselan	$ 5,708	$ 8,870	$ (3,162)
GMI-1359	69	71	(2)
Other research and development	766	950	(184)
Personnel-related and stock-based compensation	3,328	3,174	154
Research and development expense	$ 9,871	$ 13,065	$ (3,194)

(in thousands)	Six Months Ended June 30, 2020	2019	Period-to-Period Change
Uproleselan	13,869	$ 16,744	$ (2,875)
GMI-1359	173	237	(64)
Other research and development	1,802	1,857	(55)
Personnel-related and stock-based compensation	6,695	6,000	695
Research and development expense	$ 22,539	$ 24,838	$ (2,299)

During the three and six months ended June 30, 2020, our research and development expense decreased by $3.2 million, or 24%, and $2.3 million, or 9%, respectively, compared to the same periods in 2019. Manufacturing and formulation decreased by $3.9 million and $6.0 million in the three and six months ended June 30, 2020, respectively, as compared to the same periods in 2019, due to lower raw material costs. These decreases were offset by increases in clinical development expense in the three and six months ended June 30, 2020 as compared to prior periods. The higher clinical expenses were as a result of the increased enrollment in the ongoing global Phase 3 clinical trial of uproleselan in individuals with relapsed/refractory AML and the Phase 2/3 clinical trial being conducted by the NCI. Contract research services, consulting and other costs were lower in 2020 as research activities were affected at outside universities and travel by research and development personnel was largely eliminated due to the COVID-19 pandemic.

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, 2020 and 2019:

(in thousands)	Three Months Ended June 30, 2020	2019	Period-to-Period Change
Personnel-related	$ 1,602	$ 1,115	$ 487
Stock-based compensation	1,015	941	74
Legal, consulting and other professional expenses	1,471	1,490	(19)
Other	147	205	(58)
General and administrative expense	$ 4,235	$ 3,751	$ 484

(in thousands)	Six Months Ended June 30, 2020	2019	Period-to-Period Change
Personnel-related	$ 3,209	$ 2,249	$ 960
Stock-based compensation	2,101	1,815	286
Legal, consulting and other professional expenses	2,979	2,626	353
Other	386	421	(35)
General and administrative expense	$ 8,675	$ 7,111	$ 1,564

During the three and six months ended June 30, 2020, our general and administrative expense increased by $484,000, or 13%, and $1.6 million, or 22%, respectively, compared to the same periods in 2019. Personnel-related expenses increased due to additional general and administrative headcount, annual salary adjustments awarded in the first quarter of 2020 and retention bonuses. For the six months ended June 30, 2020, patent, legal fees, consulting and other professional expenses, including director and officer's insurance premiums, increased by $353,000 as compared to the six months ended June 30, 2019. There was minimal change in legal, consulting and other professional fees for the three months ended June 30, 2020 as compared to the three months ended June 30, 2019. Other expenses decreased for both the three and six months ended June 30, 2020 due to lower travel, meals and conference registration expenses as a result of the travel restrictions due to the COVID-19 pandemic.

Interest Income

During the three and six months ended June 30, 2020 interest income decreased by $959,000, or 97%, and $1.6 million, or 77%, respectively, compared to the same periods in 2019, due to lower average cash balances and lower interest rates on those balances due to the market reaction to the COVID-19 pandemic.

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, 2020, we had $149.8 million in cash and cash equivalents.

In September 2017, we entered into a new at-the-market sales agreement with Cowen, under which we may offer and sell, from time to time at our sole discretion, shares of our common stock having an aggregate offering price of up to $100.0 million through Cowen acting as our sales agent. During the year ended December 31, 2017, we sold an aggregate of 1,600,000 shares of our common stock under the at-the-market facility for net proceeds of $19.3 million. During the three months ended June 30, 2020, we sold 3,126,709 shares of common stock under the at-the-market sales agreement. The shares were sold at a weighted average price per share of $3.16, for aggregate net proceeds of $9.6 million, after deducting commissions and offering expenses. There were no shares sold under the September 2017 Sales Agreement during the year ended December 31, 2019. As of June 30, 2020, $70.1 million remained available to be sold under the terms of the September 2017 Sales Agreement. The shelf registration statement under which the shares to be sold under the September 2017 Sales Agreement are registered expires on October 6, 2020.

Subsequent to June 30, 2020, we sold an additional 1,010,033 shares of common stock under the September 2017 Sales Agreement at a weighted average price per share of $4.65, for aggregate net proceeds of $4.5 million, after deducting commissions and offering expenses.

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. Our ability to earn the milestone and royalty payments and their timing will be dependent upon the outcome of Apollomics' activities and is uncertain at this time.

Funding Requirements

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

The successful development of any of our drug candidates is highly uncertain. As such, at this time, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the remainder of the development of 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 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. As discussed above, at this time we can not accurately predict changes in our cash used in operating activities or the timing of completion of enrollment in our Phase 3 clinical trial of uproleselan due to the COVID-19 pandemic. We are continuing to assess and monitor the COVID-19 situation and the potential impact to our clinical trial plans and expectations as a result of delayed site initiations and patient recruitment and enrollment. As we continue to gather data regarding our clinical trial activities, we expect to be in a position to assess the need, if any, to change our previous guidance.

Cash Flows

The following is a summary of our cash flows for the six months ended June 30, 2020 and 2019:

	Six Months Ended June 30,	
(in thousands)	**2020**	**2019**
Net cash provided by (used in):		
Operating activities	$ (18,052)	$ (25,742)
Investing activities	(15)	(114)
Financing activities	9,710	106
Net change in cash and cash equivalents	$ (8,357)	$ (25,750)

Operating Activities

Net cash used in operating activities for the six months ended June 30, 2020 and 2019 was primarily the result of ongoing costs associated with our uproleselan clinical development programs which includes significant costs for project support, investigator site start-up costs and patient enrollment fees as well as clinical manufacturing costs. 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 payment of $9.0 million received from Apollomics.

Investing Activities

Net cash used in investing activities for the six months ended June 30, 2020 and 2019 was for computer, office and laboratory equipment.

Financing Activities

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 from our at-the-market facility with Cowen of $9.6 million and $136,000 in proceeds

from stock option exercises. Net cash provided by financing activities for the six months ended June 30, 2019 consisted solely of proceeds from stock option exercises.

Off-Balance Sheet Arrangements

During the six months ended June 30, 2020, 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, 2020 and December 31, 2019, we had cash and cash equivalents of $149.8 million and $158.2 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, 2020, 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, 2020 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. Except as set forth below, 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, 2019, filed with the Securities and Exchange Commission on February 28, 2020.

Our business could be adversely affected by the effects of health epidemics or pandemics—including the recent COVID-19 outbreak—in regions where we or third parties on whom we rely have significant manufacturing facilities, clinical trial sites or other business operations.

Our business could be adversely affected by health epidemics or pandemics in regions where we have concentrations of clinical trial sites or other business operations, and could cause significant disruption in the operations of third-party collaborators, manufacturers and CROs upon whom we rely. For example, in December 2019, a novel strain of coronavirus, SARS-CoV-2, causing a disease referred to as COVID-19, was reported to have surfaced in Wuhan, China. Since then, COVID-19 has spread to multiple countries, including the United States and several European countries. In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic, and the U.S. government imposed travel restrictions on travel between the United States, Europe and certain other countries. Further, the President of the United States declared the COVID-19 pandemic a national emergency, invoking powers under the Stafford Act, the legislation that directs federal emergency disaster response. Similarly, a state of emergency and catastrophic health emergency related to the spread of COVID-19 was declared for the State of Maryland on March 5, 2020, including Rockville, Maryland where our headquarters are located. In March and April 2020, the Governor of Maryland renewed the emergency declarations and issued aggressive proclamations and orders to reduce the spread of the disease, including a stay-at-home order. Although the initial stay-at-home order has been superseded, Maryland continues to be under a state of emergency and catastrophic health emergency, with significant restrictions imposed on business activity.

In response to these public health directives and orders, we have implemented a work-from-home policy for our employees. The effects of our work-from-home policy may negatively impact productivity, disrupt our business and delay our clinical programs and timelines, the magnitude of which will depend, in part, on the length and severity of the restrictions and other limitations on our ability to conduct our business in the ordinary course. These and similar, and perhaps more severe, disruptions in our operations could negatively impact our business, operating results and financial condition.

Quarantines, shelter-in-place, stay-at-home, executive and similar government orders—or the perception that such orders, shutdowns or other restrictions on the conduct of business operations could occur—related to COVID-19 or other infectious diseases, could impact personnel at third-party manufacturing facilities in the United States and other countries, or the availability or cost of materials, which would disrupt our supply chain. For example, any manufacturing supply interruption of uproleselan, which is currently manufactured at facilities in Switzerland and China, could adversely affect our ability to conduct ongoing and future clinical trials of uproleselan.

In addition, our clinical trials may be affected by the COVID-19 pandemic. Clinical site initiation and patient enrollment may be delayed due to prioritization of hospital resources toward the COVID-19 pandemic. Some patients may not be able to comply with clinical trial protocols if quarantines impede patient movement or interrupt healthcare services. Similarly, our ability to recruit and retain patients and principal investigators and site staff who, as healthcare providers, may have heightened exposure to COVID-19 and adversely impact our clinical trial operations.

The spread of COVID-19, which has caused a broad impact globally, may materially affect us economically. While the potential economic impact brought by, and the duration of, the COVID-19 outbreak may be difficult to assess or predict, a widespread pandemic could result in significant disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect our liquidity. In addition, a recession or market correction resulting from the spread of COVID-19 could materially affect our business and the value of our common stock.

The global pandemic of COVID-19 continues to rapidly evolve. The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. We do not yet know the full extent of potential delays or impacts on our business, our clinical trials, healthcare systems or the global economy as a whole. However, these effects could have a material impact on our operations, and we will continue to monitor the COVID-19 situation closely.

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

We believe that our cash and cash equivalents as of December 31, 2019 will enable us to fund our operating expenses and capital expenditure requirements into 2022. However, we will need to obtain substantial additional funding in connection with our continuing operations. Our future capital requirements will depend on many factors, including:

- the scope, progress, results and costs of preclinical development, laboratory testing and clinical trials for our drug candidates, including our ongoing and planned clinical trials of uproleselan, GMI-1359 and GMI-1687;
- the number and development requirements of other drug candidates that we may pursue;
- the costs, timing and outcome of regulatory review of our drug candidates;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our drug candidates for which we receive marketing approval;
- the revenue, if any, received from commercial sales of our drug candidates for which we receive marketing approval;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims; and
- the extent to which we acquire or in-license other drug candidates and technologies.

Identifying potential drug candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we or any current or future collaborators may never generate the necessary data or results required to obtain regulatory approval and achieve product sales. In addition, our drug candidates, if approved, may not achieve commercial success. Our commercial revenue, if any, will be derived from the sale of drugs that we do not expect to be commercially available for several years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts. For example, our ability to raise additional capital may be adversely impacted by potential worsening global economic conditions and the recent disruptions to and volatility in the credit and financial markets in the United States and worldwide resulting from the ongoing COVID-19 pandemic.

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

As described in this report, we are currently conducting a Phase 3 clinical trial of our drug candidate uproleselan, for which we currently expect to complete enrollment in the second half of 2021. However, the timing for completion of enrollment in this and other clinical trials could be delayed for a number of reasons. For example, we have already begun

to experience delays in recruitment for this trial as a result of "social distancing" initiatives in the United States and other countries in which our trial is conducted as a result of the ongoing COVID-19 pandemic. As the situation continues to evolve on a daily basis, it is impossible for us to assess whether these delays in recruitment will be ongoing in the short- or long-term. In addition, we or our collaborators may not be able to initiate or continue clinical trials for our drug candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside the United States. In particular, because our drug candidates are intended to treat patients with orphan diseases such as AML and osteosarcoma, our or our collaborators' ability to enroll eligible patients may be limited or may result in slower enrollment than we anticipate. In addition, some of our competitors have ongoing clinical trials for drug candidates that treat the same or similar indications as our drug candidates, and patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors' drug candidates. Patient enrollment is also affected by other factors, including:

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

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

The trading price of our common stock has been and is likely to continue to be volatile.

Since our IPO in January 2014, our stock price has been volatile. The stock market in general and the market for biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their common stock at or above the price paid for the shares. The market price for our common stock may be influenced by many factors, including:

- announcements relating to development, regulatory approvals or commercialization of our drug candidates;
- actual or anticipated variations in our operating results;
- changes in financial estimates by us or by any securities analysts who might cover our stock;
- conditions or trends in our industry;
- changes in laws or other regulatory actions affecting us or our industry, such as drug pricing and reimbursement;
- stock market price and volume fluctuations of comparable companies and, in particular, those that operate in the biopharmaceutical industry;
- announcements by us or our competitors of significant acquisitions, strategic partnerships or divestitures;

- announcements of investigations or regulatory scrutiny of our operations or lawsuits filed against us;
- capital commitments;
- investors' general perception of our company and our business;
- disputes concerning our intellectual property or other proprietary rights;
- recruitment or departure of key personnel; and
- sales of our common stock, including sales by our directors and officers or specific stockholders.

In addition, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies, including very recently in connection with the evolving COVID-19 pandemic, which has resulted in volatile stock prices for many companies notwithstanding the lack of a fundamental change in their underlying business models or prospects. These fluctuations have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry factors, including potentially worsening economic conditions and other adverse effects or developments relating to the ongoing COVID-19 pandemic, political, regulatory and other market conditions, may negatively affect the market price of shares of our common stock, regardless of our actual operating performance.

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

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).
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.
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)

* 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: July 31, 2020

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

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, 2020 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: July 31, 2020

/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, 2020 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: July 31, 2020

/s/ Brian M. Hahn
Brian M. Hahn
Chief Financial Officer and Senior Vice President
(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, 2020, 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 31st day of July 2020.

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

* 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.