

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

FORM 10-Q

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

For the quarterly period ended June 30, 2022

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: 001-39334

Biora Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

4330 La Jolla Village Drive, Suite 300, San Diego, CA
(Address of principal executive offices)

27-3950390
(I.R.S. Employer
Identification No.)

92122
(Zip Code)

(855) 293-2639
(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, par value \$0.001 per share	BIOR	The Nasdaq Global 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, 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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
Emerging growth company	<input checked="" type="checkbox"/>		

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

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

As of August 1, 2022, the registrant had 186,623,605 shares of common stock, par value \$0.001 per share, outstanding.

BIORA THERAPEUTICS, INC.

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TRADEMARKS AND CERTAIN TERMS

In this Quarterly Report on Form 10-Q, "Biora," "Biora Therapeutics," the "Company," "we," "us" and "our" refer to Biora Therapeutics, Inc., and our wholly-owned subsidiaries on a consolidated basis, unless the context otherwise provides.

Biora Therapeutics™ is a trademark of Biora Therapeutics, Inc. Any other brand names or trademarks appearing in this Quarterly Report on Form 10-Q are the property of their respective holders.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements.

BIORA THERAPEUTICS, INC.
Condensed Consolidated Balance Sheets
(In thousands, except share and per share data)
(Unaudited)

	June 30, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 48,506	\$ 88,397
Accounts receivable, net	—	653
Income tax receivable	817	—
Prepaid expenses and other current assets	8,675	7,232
Current assets of disposal group held for sale	2,147	2,147
Total current assets	60,145	98,429
Property and equipment, net	2,454	4,012
Right-of-use assets	2,203	—
Other assets	6,227	326
Goodwill	6,072	6,072
Total assets	<u>\$ 77,101</u>	<u>\$ 108,839</u>
Liabilities and Stockholders' Deficit		
Current liabilities:		
Accounts payable	\$ 4,315	\$ 8,709
Accrued expenses and other current liabilities	30,940	34,157
Warrant liability	5,329	18,731
Current portion of capital lease obligations	—	12
Total current liabilities	40,584	61,609
Convertible notes, net of unamortized discount of \$5,639 and \$6,333 as of June 30, 2022 and December 31, 2021, respectively	127,086	126,392
Other long-term liabilities	5,537	5,814
Total liabilities	<u>\$ 173,207</u>	<u>\$ 193,815</u>
Commitments and contingencies (Note 10)		
Stockholders' deficit:		
Common stock – \$0.001 par value. 350,000,000 shares authorized as of June 30, 2022 and December 31, 2021; 190,322,688 and 185,736,890 shares issued as of June 30, 2022 and December 31, 2021, respectively; 186,289,978 and 181,872,676 shares outstanding as of June 30, 2022 and December 31, 2021, respectively	150	146
Additional paid-in capital	730,833	722,646
Accumulated deficit	(808,007)	(788,686)
Treasury stock – at cost; 4,032,710 and 3,864,214 shares of common stock as of June 30, 2022 and December 31, 2021, respectively	(19,082)	(19,082)
Total stockholders' deficit	(96,106)	(84,976)
Total liabilities and stockholders' deficit	<u>\$ 77,101</u>	<u>\$ 108,839</u>

See accompanying notes to unaudited condensed consolidated financial statements.

BIORA THERAPEUTICS, INC.
Condensed Consolidated Statements of Operations
(In thousands, except share and per share data)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Revenues	\$ 104	\$ 463	\$ 211	\$ 630
Operating expenses:				
Research and development	5,904	13,401	12,462	25,074
Selling, general and administrative	8,410	22,715	21,867	42,673
Total operating expenses	14,314	36,116	34,329	67,747
Loss from operations	(14,210)	(35,653)	(34,118)	(67,117)
Interest expense, net	(2,772)	(3,502)	(5,532)	(7,022)
Gain (loss) on warrant liability	4,413	(5,146)	13,402	(2,496)
Other income, net	5,735	2,901	4,924	17,774
Loss before income taxes	(6,834)	(41,400)	(21,324)	(58,861)
Income tax benefit	(837)	—	(837)	—
Loss from continuing operations	(5,997)	(41,400)	(20,487)	(58,861)
Gain (loss) from discontinued operations	484	(37,131)	1,166	(51,934)
Net loss	(5,513)	(78,531)	(19,321)	(110,795)
Net loss per share from continuing operations, basic and diluted	\$ (0.03)	\$ (0.65)	\$ (0.11)	\$ (0.97)
Net (loss) gain per share from discontinued operations, basic and diluted	\$ —	\$ (0.58)	\$ 0.01	\$ (0.85)
Net loss per share, basic and diluted	\$ (0.03)	\$ (1.23)	\$ (0.10)	\$ (1.82)
Weighted average shares outstanding, basic and diluted	184,371,626	63,942,298	183,789,876	60,770,246

See accompanying notes to unaudited condensed consolidated financial statements.

BIORA THERAPEUTICS, INC.
Condensed Consolidated Statements of Stockholders' Deficit
(In thousands, except share data)
(Unaudited)

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Treasury Stock		Total Stockholders' Deficit
	Shares	Amount			Shares	Amount	
Balance at December 31, 2021	185,736,890	\$ 146	\$ 722,646	\$ (788,686)	(3,864,214)	\$ (19,082)	\$ (84,976)
Issuance of common stock, net	2,130,327	2	3,624	—	—	—	3,626
Issuance of common stock upon vesting of restricted stock units	288,003	—	(80)	—	(93,076)	—	(80)
Stock-based compensation expense	—	—	2,053	—	—	—	2,053
Net loss	—	—	—	(13,808)	—	—	(13,808)
Balance at March 31, 2022	188,155,220	\$ 148	\$ 728,243	\$ (802,494)	(3,957,290)	\$ (19,082)	\$ (93,185)
Issuance of common stock, net	1,725,723	2	1,166	—	—	—	1,168
Issuance of common stock under employee stock purchase plan	125,059	—	89	—	—	—	89
Issuance of common stock upon vesting of restricted stock unit awards	316,686	—	(111)	—	(75,420)	—	(111)
Stock-based compensation expense	—	—	1,446	—	—	—	1,446
Net loss	—	—	—	(5,513)	—	—	(5,513)
Balance at June 30, 2022	190,322,688	\$ 150	\$ 730,833	\$ (808,007)	(4,032,710)	\$ (19,082)	\$ (96,106)

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Treasury Stock		Total Stockholders' Deficit
	Shares	Amount			Shares	Amount	
Balance at December 31, 2020	59,287,331	\$ 59	\$ 452,992	\$ (541,274)	(3,515,028)	\$ (18,771)	\$ (106,994)
Issuance of common stock, net	4,370,629	4	11,258	—	—	—	11,262
Exercise of common stock options	71,284	—	88	—	—	—	88
Issuance of common stock upon vesting of restricted stock units	174,730	—	(228)	—	(48,581)	(1)	(229)
Stock-based compensation expense	—	—	2,630	—	—	—	2,630
Net loss	—	—	—	(32,264)	—	—	(32,264)
Balance at March 31, 2021	63,903,974	\$ 63	\$ 466,740	\$ (573,538)	(3,563,609)	\$ (18,772)	\$ (125,507)
Issuance of common stock, net	15,694,332	16	11,991	—	—	—	12,007
Issuance of common stock upon exercise of options	25,498	—	26	—	(5,050)	(6)	20
Issuance of common stock under employee stock purchase plan	254,832	1	560	—	—	—	561
Issuance of common stock upon vesting of restricted stock unit awards	237,388	—	(251)	—	(79,442)	—	(251)
Issuance of stock purchase warrant	—	—	41,926	—	—	—	41,926
Issuance of common stock upon conversion of debt, net	611,616	1	2,068	—	—	—	2,069
Issuance of common stock upon conversion of interest, net	1,268,116	1	3,626	—	—	—	3,627
Stock-based compensation expense	—	—	4,470	—	—	—	4,470
Net loss	—	—	—	(78,531)	—	—	(78,531)
Balance at June 30, 2021	81,995,756	\$ 82	\$ 531,156	\$ (652,069)	(3,648,101)	\$ (18,778)	\$ (139,609)

See accompanying notes to unaudited condensed consolidated financial statements.

BIORA THERAPEUTICS, INC.
Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Six Months Ended June 30,	
	2022	2021
Operating Activities:		
Net loss	\$ (19,321)	\$ (110,795)
Adjustments to reconcile net loss to net cash used in operating activities:		
(Gain) loss from discontinued operations	(1,166)	51,934
Non-cash revenue reserve	201	172
Depreciation and amortization	547	965
Stock-based compensation expense	3,499	5,625
Loss on extinguishment of convertible notes	—	242
Amortization of debt discount and non-cash interest	694	4,753
Loss on disposal of property and equipment	320	—
Impairment of property and equipment	545	—
Gain on investment in Enumera Molecular, Inc.	(5,731)	—
Change in fair value of derivative liability	—	(17,977)
Change in fair value of warrant liability	(13,402)	2,496
Changes in operating assets and liabilities:		
Income tax receivable	(817)	—
Prepaid expenses and other current assets	(904)	(4,888)
Other assets	—	22
Accounts payable	(4,434)	1,683
Accrued expenses and other liabilities	(4,486)	7,041
Other long-term liabilities	(958)	6,591
Net cash used in operating activities - continuing operations	(45,413)	(52,136)
Net cash provided by (used in) operating activities - discontinued operations	1,819	(32,114)
Net cash used in operating activities	(43,594)	(84,250)
Investing Activities:		
Purchases of property and equipment	(556)	(853)
Net cash used in investing activities - continuing operations	(556)	(853)
Net cash used in investing activities - discontinued operations	—	(168)
Net cash used in investing activities	(556)	(1,021)
Financing Activities:		
Proceeds from issuance of common stock, net	4,794	23,377
Proceeds from issuance of common stock warrants	—	39,430
Proceeds from issuance of common stock under employee stock purchase plan	89	—
Payment of deferred offering costs	—	(50)
Payments for financing of insurance premiums	(612)	(2,680)
Principal payments on mortgages payable	—	(35)
Principal payments on capital lease obligations	(12)	(179)
Net cash provided by financing activities - continuing operations	4,259	59,863
Net cash used in financing activities - discontinued operations	—	(121)
Net cash provided by financing activities	4,259	59,742
Net decrease in cash and cash equivalents	(39,891)	(25,529)
Cash and cash equivalents at beginning of period	88,397	91,520
Cash and cash equivalents at end of period	\$ 48,506	\$ 65,991

See accompanying notes to unaudited condensed consolidated financial statements.

BIORA THERAPEUTICS, INC.
Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Six Months Ended June 30,	
	2022	2021
Supplemental disclosure of cash flow information:		
Cash paid for interest	\$ 4,811	\$ 3,068
Cash paid for income taxes	17	46
Supplemental schedule of non-cash investing and financing activities:		
Lease assets obtained in exchange for operating lease liabilities	2,922	—
Investment in Enumera Molecular, Inc. in exchange for assets	6,000	—
Purchases of property and equipment in accounts payable	40	135
Conversion of convertible note	—	2,069
Issuance of common stock upon conversion of interest	—	3,627
Equity offering costs incurred but not paid	—	2,150
Debt offering costs incurred but not paid	—	62

See accompanying notes to unaudited condensed consolidated financial statements.

BIORA THERAPEUTICS, INC.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Organization and Description of Business

Biora Therapeutics, Inc. (the "Company" or "Biora" or "Biora Therapeutics"), formerly known as Progenity, Inc. ("Progenity"), a Delaware corporation, commenced operations in 2010 with its corporate office located in San Diego, California. Progenity's historical operations included a licensed Clinical Laboratory Improvement Amendments and College of American Pathologists certified laboratory located in Michigan specializing in molecular testing markets serving women's health providers in the obstetric, gynecological, fertility, and maternal fetal medicine specialty areas in the United States. Previously, Progenity's core business was focused on carrier screening and noninvasive prenatal test market, targeting preconception planning, and routine pregnancy management for genetic disease risk assessment. Through its former affiliation with Mattison Pathology, LLP ("Mattison"), a Texas limited liability partnership doing business as Avero Diagnostics ("Avero"), located in Lubbock and Dallas, Texas, the Company's operations also included anatomic and molecular pathology testing products in the United States.

In order to refocus efforts and resources on its research and development pipeline, in June 2021, Progenity announced a strategic transformation ("Strategic Transformation") that included the closure of the Progenity genetics laboratory in Ann Arbor, Michigan, and in December 2021, Progenity sold Avero, together referred to as the Laboratory Operations. The Company has excluded from continuing operations for all periods presented in this report revenues and expenses associated with its Laboratory Operations, which are reported as discontinued operations. See Note 4 for additional information on the Laboratory Operations.

On April 12, 2022, Progenity announced that it would rebrand the Company to better reflect the current focus on its therapeutics pipeline, and would begin to operate as Biora Therapeutics, Inc., a Delaware corporation. The Company subsequently changed its name to Biora Therapeutics, Inc. on April 26, 2022.

Biora Therapeutics is a biotechnology company developing oral biotherapeutics. The Company's drug-device combinations could enable new treatment approaches in the delivery of therapeutics in two main areas:

- Targeted delivery of therapeutics ("Targeted Therapeutics") to the site of disease in the gastrointestinal ("GI") tract, designed to improve outcomes for patients with Inflammatory Bowel Disease; and
- Systemic delivery of biotherapeutics ("Systemic Therapeutics"), designed to replace injections with needle-free, oral delivery technology.

The Company is also developing diagnostics devices to help characterize the GI tract and diagnose GI diseases, such as Small Intestine Bacterial Overgrowth, through the development of innovative technologies that are designed to diagnose at the site of the disease. Using these platforms, the Company intends to develop therapeutics and diagnostic solutions for a broad range of disorders.

Liquidity

As of June 30, 2022, the Company had cash and cash equivalents of \$48.5 million and an accumulated deficit of \$808.0 million. For the six months ended June 30, 2022, the Company reported a net loss of \$19.3 million and cash used in operating activities of \$43.6 million. The Company's primary sources of capital have historically been the sale of common stock and warrants, private placements of preferred stock and the incurrence of debt. As of June 30, 2022, the Company had \$127.1 million of convertible senior notes ("Convertible Notes") outstanding (see Note 8). As a result of the Strategic Transformation, management believes that future operating expenses will be reduced. However, as the Strategic Transformation was announced in June of 2021 and the Company completed the sale of Avero in December of 2021, the Company has not eliminated the risks surrounding its ability to fund operations for at least 12 months from the issuance date of the condensed consolidated financial statements for the three and six months ended June 30, 2022, without relying on additional funding. As a result, there is substantial doubt about the Company's ability to continue as a going concern for 12 months following the issuance date of the condensed consolidated financial statements for the three and six months ended June 30, 2022.

The Company's ability to continue as a going concern is dependent upon its ability to raise additional funding. Management believes that the Company's liquidity position as of the date of this filing provides sufficient runway to achieve important research and development pipeline milestones. Management intends to raise additional capital through equity offerings and/or debt financings, or from other potential sources of liquidity, which may include new collaborations, licensing or other commercial agreements for one or more of the Company's research programs or patent portfolios, or divestitures of the Company's assets. Adequate funding, if needed, may not be available to the Company on acceptable terms, or at all. The Company's ability to raise additional funds may be adversely impacted by potential worsening global economic conditions and the disruptions to, and volatility in, the credit and financial markets in the United States and worldwide resulting from the ongoing COVID-19 pandemic. If the Company is unable to raise capital when

needed or on attractive terms, it would be forced to delay, reduce, or eliminate its research and development programs or other operations. If any of these events occur, the Company's ability to achieve its operational goals would be adversely affected.

Uncertainties Related to the COVID-19 Pandemic

The ongoing COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains and created significant volatility and disruption of financial markets. The Company has been materially and negatively affected by the COVID-19 pandemic; however, the extent of the continued impact of the COVID-19 pandemic on the Company's operational and financial performance, including its ability to execute its business strategies and initiatives in the expected time frame, will depend on future developments, including the duration and continued spread of the pandemic, which is uncertain and cannot be predicted. The Company could be further negatively affected by the widespread outbreak of an illness or any other communicable disease, or any other public health crisis that results in economic and trade disruptions, including the disruption of global supply chains. An extended period of global supply chain and economic disruption could materially affect the Company's business, results of operations, access to sources of liquidity and financial condition.

The estimates used for, but not limited to, determining the fair value of goodwill could be impacted by the pandemic. While the full impact of the COVID-19 pandemic is unknown at this time, the Company has made appropriate estimates based on the facts and circumstances available as of the reporting date. These estimates may change as new events occur and additional information is obtained.

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company's condensed consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. These financial statements should be read in conjunction with the Company's audited consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2021, as filed with the Securities and Exchange Commission, ("SEC"), from which management derived the Company's condensed consolidated balance sheet as of December 31, 2021. Certain amounts in prior periods have been reclassified to reflect the impact of the discontinued operations treatment of the Laboratory Operations in order to conform to the current period presentation.

The condensed consolidated financial statements include the accounts of Biora Therapeutics, Inc., its wholly-owned subsidiaries, and, for the three and six months ended June 30, 2021, an affiliated professional partnership with Avero with respect to which the Company had a specific management arrangement (see Note 3). All significant intercompany balances and transactions have been eliminated in consolidation.

Financial Statement Presentation Change

In order to more closely align with the Company's business, and to better serve financial statement users, the Company has combined selling and marketing expenses with general and administrative expenses into a single selling, general and administrative expense line item. The Company's previous marketing expenses were associated with our discontinued Laboratory Operations and the Company no longer incurs these costs. Prior period amounts have been reclassified to conform to the current presentation.

Unaudited Interim Financial Information

The accompanying condensed consolidated financial statements are unaudited, have been prepared on the same basis as the audited annual financial statements and, in the opinion of management, reflect all adjustments, consisting of normal recurring adjustments, that are necessary to present fairly the results for the interim periods presented. Results are not necessarily indicative of results to be expected for the year ending December 31, 2022, any other interim periods, or any future year or period, particularly in light of the COVID-19 pandemic and its impact on domestic and global economies. The balance sheet as of December 31, 2021 included herein was derived from the audited financial statements as of that date. Certain disclosures have been condensed or omitted from the interim financial statements.

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 contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant items subject to such estimates include the estimate of variable consideration in connection with the recognition of revenue, the valuation of stock options, the valuation of goodwill, the valuation of the derivative liability associated with the Convertible Notes, accrual for reimbursement claims and settlements, the valuation of warrant liabilities, the valuation of assets held for sale, assessing future tax exposure and the realization of deferred tax assets, and the useful lives and the recoverability of property and equipment. The Company bases these estimates on historical and anticipated results, trends, and various other assumptions that the Company believes are reasonable under the circumstances, including assumptions as to future events. These estimates form the basis for making judgments about the carrying values of assets and liabilities and recorded revenues and expenses that are not readily apparent from other sources. Actual results could differ from those estimates and assumptions.

Assets Held for Sale and Discontinued Operations

Assets and liabilities are classified as held for sale when all of the following criteria for a plan of sale have been met: (1) management, having the authority to approve the action, commits to a plan to sell the assets; (2) the assets are available for immediate sale, in their present condition, subject only to terms that are usual and customary for sales of such assets; (3) an active program to locate a buyer and other actions required to complete the plan to sell the assets have been initiated; (4) the sale of the assets is probable and is expected to be completed within one year; (5) the assets are being actively marketed for a price that is reasonable in relation to their current fair value; and (6) actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or the plan will be withdrawn. When all of these criteria have been met, the assets and liabilities are classified as held for sale in the condensed consolidated balance sheet. Assets classified as held for sale are reported at the lower of their carrying value or fair value less costs to sell. Depreciation and amortization of assets ceases upon designation as held for sale.

Discontinued operations comprise activities that were disposed of, discontinued or held for sale at the end of the period, represent a separate major line of business that can be clearly distinguished for operational and financial reporting purposes and represent a strategic business shift having a major effect on the Company's operations and financial results according to Accounting Standard Codification ("ASC") Topic 205, *Presentation of Financial Statements*.

Additional details surrounding the Company's assets and liabilities held for sale and discontinued operations are included in Note 4.

Investments

The Company accounts for investments in equity securities without a readily determinable fair value at cost, minus impairment. If the Company identifies observable price changes in orderly transactions for an identical or a similar investment of the same issuer, the Company will measure the equity security at fair value as of the date that the observable transaction occurred in accordance with ASC Topic 321, *Investments-Equity Securities*.

Revenue Recognition

Revenue is recognized in accordance with the Financial Accounting Standards Board ("FASB") ASC Topic 606, *Revenue from Contracts with Customers* ("ASC 606"). In accordance with ASC 606, the Company follows a five-step process to recognize revenues: 1) identify the contract with the customer, 2) identify the performance obligations, 3) determine the transaction price, 4) allocate the transaction price to the performance obligations and 5) recognize revenues when the performance obligations are satisfied.

Revenue was primarily derived from providing molecular testing products, which were reimbursed through arrangements with third-party payors, laboratory distribution partners, and amounts from individual patients. Third-party payors include commercial payors, such as health insurance companies, health maintenance organizations and government health benefit programs, such as Medicare and Medicaid. The Company's contracts generally contained a single performance obligation, which was the delivery of the test results, and the Company satisfied its performance obligation at a point in time upon the delivery of the results, which then triggered the billing for the product. The amount of revenue recognized reflects the amount of consideration the Company expected to be entitled to ("transaction price") and considered the effects of variable consideration. Revenue was recognized when control of the promised product was transferred to customers, in an amount that reflected the consideration the Company expected to be entitled to in exchange for those products.

The Company applies the following practical expedients and exemptions:

- Incremental costs incurred to obtain a contract are expensed as incurred because the related amortization period would be one year or less. The costs are included in selling and marketing expenses.
- No adjustments to amounts of promised consideration are made for the effects of a significant financing component because the Company expects, at contract inception, that the period between the transfer of a promised good or service and customer payment for that good or service will be one year or less.

Payor Concentration

The Company historically relied upon reimbursements from third-party government payors and private-payor insurance companies to collect accounts receivable. As a result of the Strategic Transformation, all revenue from Laboratory Operations has been classified as discontinued operations and there were no significant concentrations as of June 30, 2022. The Company's significant third-party payors and their related accounts receivable balances and revenues as a percentage of total accounts receivable balances as of December 31, 2021 and of revenues for the three and six months ended June 30, 2021 are as follows:

	<u>Percentage of Accounts Receivable</u> December 31, 2021
Blue Shield of Texas	4.0 %
Government Health Benefits Programs	55.8 %
United Healthcare	7.2 %

	<u>Percentage of Revenue ⁽¹⁾</u>	
	<u>Three Months Ended</u>	<u>Six Months Ended</u>
	June 30, 2021	
Blue Shield of Texas	24.9 %	23.7 %
Government Health Benefits Programs	25.2 %	24.2 %
Aetna	7.0 %	7.4 %
United Healthcare	7.1 %	6.9 %
Anthem	5.3 %	3.2 %

(1) Percentage of revenue table shows amounts as a percentage of total revenue, including revenue classified as discontinued operations. Refer to Note 5 for details of the breakdown of revenue.

Leases

The Company determines if an arrangement is or contains a lease at inception. For leases with a term greater than one year, lease right-of-use assets and lease liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. In determining the net present value of lease payments, the Company uses its incremental borrowing rate which represents an estimated rate of interest that the Company would have to pay to borrow equivalent funds on a collateralized basis at the lease commencement date. Leases are classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the statement of operations.

Net Loss Per Share

Basic net loss per share is computed by dividing the net loss by the weighted average number of shares of common stock outstanding during the period. Diluted net loss per share is computed by dividing the net loss by the weighted average number of shares of common stock and potentially dilutive securities outstanding for the period. As the Company has reported net losses for all periods presented, all potentially dilutive securities are antidilutive and, accordingly, basic net loss per share equals diluted net loss per share.

Recent Accounting Pronouncements Adopted

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which supersedes FASB ASC Topic 840, *Leases (Topic 840)*, and provides principles for the recognition, measurement, presentation and disclosure of leases for both lessees and lessors. The Company adopted the provisions of this guidance on January 1, 2022, using the effective date method. As a result of adopting ASC 842, the Company recognized right-of-use assets and lease liabilities of \$2.2 million and \$2.2 million, respectively, on January 1, 2022. The difference between the right-of-use assets and lease liabilities is attributed to the elimination of deferred rent and prepaid rent. There was no adjustment to the opening balance of accumulated deficit as a result of the adoption. The Company elected to use the package of practical expedients available in the new lease standard, allowing it not to reassess: (a) whether expired or

existing contracts contain leases under the new definition of a lease; (b) lease classification for expired or existing leases; and (c) whether previously capitalized initial direct costs would qualify for capitalization under the new lease standard.

In May 2021, the FASB issued ASU No. 2021-04, *Issuer's Accounting for Certain Modification or Exchanges of Freestanding Equity-Classified Written Call Options*, which provides a principles-based framework to determine whether an issuer should recognize the modification or exchange as an adjustment to equity or an expense. The Company adopted this standard on January 1, 2022, which did not have a material impact on the condensed consolidated financial statements.

Recent Accounting Pronouncements Not Yet Adopted

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses*, which requires the measurement of expected credit losses for financial instruments carried at amortized cost, such as accounts receivable, held at the reporting date based on historical experience, current conditions and reasonable forecasts. The main objective of this standard is to provide financial statement users with more decision-useful information about the expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. In November 2018, the FASB issued ASU No. 2018-19, *Codification Improvements to Topic 326, Financing Instruments—Credit Losses*, which included an amendment of the effective date. The standard is effective for the Company for annual reporting periods beginning after December 15, 2022. The Company does not expect the adoption of this standard to have a significant impact on its consolidated financial statements.

In August 2020, the FASB issued ASU No. 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging-Contracts in Entity's Own Equity (Subtopic 815-40)-Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*, which simplifies the accounting for convertible instruments, amends the guidance on derivative scope exceptions for contracts in an entity's own equity, and modifies the guidance on diluted earnings per share calculations as a result of these changes. The standard is effective for the Company for annual reporting periods beginning after December 15, 2023. The Company is currently evaluating the impact the adoption of this standard may have on its consolidated financial statements.

3. Variable Interest Entity

In June 2015, the Company, through a wholly-owned subsidiary, entered into a series of agreements with Avero. The subsidiary entity entered into a purchase agreement to acquire certain assets from Mattison used in the operations of Avero. The purchase agreement was accounted for under the acquisition method in accordance with the provisions of ASC Topic 805, *Business Combinations*. The subsidiary entity also entered into a nominee agreement which provided it with the right, but not the obligation, to purchase, or to designate a person(s) to purchase, the stock of Avero at any time for a nominal amount.

In December 2021, the Company entered into an asset purchase agreement with Northwest Pathology to sell certain assets and liabilities of Avero for \$10.9 million. The Company no longer has a controlling interest in Avero and therefore does not consolidate Avero beginning at December 31, 2021. Prior to the date of sale, Avero income statement activity is included in discontinued operations in the condensed consolidated statements of operations.

In June 2015, the Company's subsidiary entity entered into a management services arrangement that authorized the Company to perform the management services in the manner that it deemed reasonably appropriate to meet the day-to-day business needs of Avero. The management services included funding ongoing operational needs, directing activities related to contract negotiation, billing, human resources, and legal and administrative matters and processes, among others. In exchange for the management services provided, the Company's subsidiary entity was entitled to receive an annual management fee equal to the amount of the net operating income of Avero. The agreement had a 10 year term, but was terminated at the time of the sale of Avero.

Through the management services arrangement with Avero, the Company had (1) the power to direct the activities of Avero that most significantly impact its economic performance, and (2) the obligation to absorb losses of Avero or the right to receive benefits from Avero that could potentially be significant to Avero. Based on these determinations, the Company determined that Avero was a variable interest entity ("VIE") and that the Company was the primary beneficiary. The Company did not own any equity interest in Avero; however, as these agreements provide the Company the controlling financial interest in Avero, the Company consolidated Avero's balances and activities within its consolidated financial statements.

4. Strategic Transformation

Assets Held for Sale and Discontinued Operations

In June 2021, the Company announced its Strategic Transformation to reallocate resources to research and development to better position the business for future growth. The plan included the closure of the Company's genetics laboratory in Ann Arbor, Michigan and the divestiture of Avero. This plan represents a strategic business shift having a major effect on the Company's operations and financial results. The Company classified the results of its Laboratory Operations as discontinued operations in its condensed

consolidated statements of operations and consolidated statements of cash flows for all periods presented. Additionally, the remaining assets have been reported as assets held for sale in the Company's condensed consolidated balance sheets as of June 30, 2022 and December 31, 2021.

The following table presents the combined results of discontinued operations of the Laboratory Operations (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Revenues	\$ 759	\$ 18,242	\$ 2,027	\$ 42,601
Cost of sales	—	26,233	—	48,466
Gross profit (loss)	759	(7,991)	2,027	(5,865)
Operating expenses:				
Research and development	—	1,590	—	1,590
Selling and marketing	—	20,127	—	32,917
General and administrative	275	7,413	861	11,533
Total operating expenses	275	29,130	861	46,040
Other expense, net	—	(10)	—	(29)
Loss from discontinued operations before income taxes	484	(37,131)	1,166	(51,934)
Income tax benefit	—	—	—	—
Net gain (loss) from discontinued operations	\$ 484	\$ (37,131)	\$ 1,166	\$ (51,934)

The following table presents the carrying amounts of the remaining assets held for sale related to the Laboratory Operations as of June 30, 2022 and December 31, 2021 (in thousands):

	June 30, 2022	December 31, 2021
Current assets of disposal group held for sale		
Property and equipment, net	2,147	2,147
Total current assets of disposal group held for sale ⁽¹⁾	\$ 2,147	\$ 2,147

(1) The remaining assets of the Laboratory Operations are classified as held for sale and are classified as current in the unaudited condensed consolidated balance sheet at June 30, 2022 and December 31, 2021, because they are expected to be sold within one year.

Investment in Enumera Molecular, Inc.

In May 2022, the Company completed the divestiture of its single-molecule detection platform. Under the terms of the agreements, the Company contributed intellectual property and fixed assets related to the single-molecule detection platform to a newly-formed entity, Enumera Molecular, Inc. ("Enumera"), which intends to develop and commercialize the platform. As of the transaction date, the Company received 25% minority ownership, on a fully-diluted basis, of 6,000,000 Series A-1 preferred shares with an estimated value of \$6.0 million in exchange for the assets. The Company performed a VIE analysis and concluded Enumera does not meet the definition of a VIE. The Company also evaluated the characteristics of the investment and determined that the preferred stock is not in-substance common stock that would require equity method accounting. The Company concluded the appropriate accounting treatment for the investment in Enumera to be that of an equity security with no readily determinable fair value and has recorded the investment at cost, less impairment, adjusted for subsequent observable price changes. The investment is included in other assets in the Company's condensed consolidated balance sheets as of June 30, 2022. The Company recognized a gain of \$5.7 million on the investment during the three months ended June 30, 2022, included in other income, net on the condensed consolidated statements of operations, and there was no impairment recorded.

5. Revenues

The Company's revenues are generated primarily through collaboration agreements. Under ASC 606, revenue is recognized when a customer obtains control of promised goods or services. The amount of revenue recognized reflects the consideration that the Company expects to be entitled to receive in exchange for these services. The Company analyzes the nature of these performance obligations in the context of individual agreements in order to assess the distinct performance obligations.

The Company applies the following five steps to recognize revenue: (1) identify the contract with the customer, (2) identify the performance obligations, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations and (5) recognize revenues when the performance obligations are satisfied.

The Company evaluates all promised goods and services within a customer contract and determines which of such goods and services are separate performance obligations. This evaluation includes an assessment of whether the good or service is capable of being distinct and whether the good or service is separable from other promises in the contract.

The transaction price is determined based on the consideration to which the Company will be entitled in exchange for transferring goods and services to the customer. A contract may contain variable consideration, including potential payments for both milestone and research and development services. For certain potential milestone payments, the Company estimates the amount of variable consideration by using the most likely amount method. Each reporting period the Company re-evaluates the probability of achievement of such variable consideration and any related constraints. The Company will include variable consideration, without constraint, in the transaction price to the extent it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price among the performance obligations on a relative standalone selling price basis unless the transaction price is variable and meets the criteria to be allocated entirely to a performance obligation or to a distinct good or service that forms part of a single performance obligation.

Revenues historically were derived from contracts with healthcare insurers, government payors, laboratory partners and patients in connection with sales of prenatal genetic, anatomic or molecular pathology tests. The Company entered into contracts with healthcare insurers related to tests provided to patients who had health insurance coverage. Insurance carriers are considered third-party payors on behalf of the patients, and the patients who receive genetic, anatomic or molecular pathology test products are considered the customers. Tests were billed to insurance carriers, patients, or a combination of insurance carriers and patients. The Company also sold tests to laboratory partners, which are considered customers.

The Company evaluated its contracts with healthcare insurers, government payors, laboratory partners and patients and identified a single performance obligation, the delivery of a test result. The Company satisfied its performance obligation at a point in time upon the delivery of the test result, at which point the Company can bill for its products. The amount of revenue recognized reflects the transaction price and considers the effects of variable consideration, which is discussed below.

Once the Company satisfied its performance obligations upon delivery of a test result and billed for the product, the timing of the collection of payments may vary based on the payment practices of the third-party payor. The Company billed patients directly for co-pays and deductibles that they are responsible for and also billed patients directly in cases where the customer did not have insurance. All of the historical test revenue is part of the Laboratory Operations and has been included in discontinued operations in the condensed consolidated statements of operations.

The Company had established an accrual for refunds of payments previously made by healthcare insurers based on historical experience and executed settlement agreements with healthcare insurers. Any refunds are accounted for as reductions in revenues in the statement of operations as an element of variable consideration.

The transaction price was an estimate and could be fixed or variable. Variable consideration includes reimbursement from healthcare insurers, government payors, and patients and is adjusted for estimates of disallowed cases, discounts, and refunds using the expected value approach. Tests billed to healthcare insurers and directly to patients can take up to nine months to collect and the Company may be paid less than the full amount billed or not paid at all. For insurance carriers and government payors, management utilizes the expected value method using a portfolio of relevant historical data for payors with similar reimbursement characteristics. The portfolio estimate is developed using historical reimbursement data from payors and patients, as well as known current reimbursement trends not reflected in the historical data. Such variable consideration is included in the transaction price only to the extent it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainties with respect to the amount are resolved. The Company monitors these estimates at each reporting period based on actual cash collections and the status of settlement agreements with third-party payors, in order to assess whether a revision to the estimate is required. Both the initial estimate and any subsequent revision to the estimate contain uncertainty and require the use of judgment in the estimation of the transaction price and application of the constraint for variable consideration. If actual results in the future vary from the Company's estimates, the Company will adjust these estimates, which would affect revenue and earnings in the period such variances become known. The consideration expected from laboratory partners is generally a fixed amount.

The Company periodically updated its estimate of the variable consideration recognized for previously delivered performance obligations. These updates resulted in an additional \$0.5 million and \$1.9 million of revenue reported for the three and six months ended June 30, 2022, respectively, and an additional \$0.8 million and \$3.0 million of revenue reported for the three and six months ended June 30, 2021, respectively. These amounts included (i) adjustments for actual collections versus estimated variable consideration as of the beginning of the reporting period and (ii) cash collections and the related recognition of revenue in the current

period for tests delivered in prior periods due to the release of the constraint on variable consideration, offset by (iii) reductions in revenue for the accrual for reimbursement claims and settlements described in Note 10.

Disaggregation of Revenues

As a result of the classification of Laboratory Operations to discontinued operations, the Company is only showing disaggregation for prior year. The Company's current revenue is related to license and collaboration agreements. The following tables show revenues disaggregated by payor type and revenue classification (in thousands):

Payor	Three Months Ended		Six Months Ended	
	June 30, 2021			
Commercial third-party payors	\$	13,044	\$	29,495
Government health benefit programs ⁽¹⁾		4,725		10,450
Patient/laboratory distribution partners		936		3,286
Total revenues	\$	18,705	\$	43,231

(1) The revenue amounts include accruals for reimbursement claims and settlements included in the estimates of variable consideration recorded during the three and six months ended June 30, 2021. Revenues recognized reflect the effects of variable consideration, and include adjustments for estimates of disallowed cases, discounts, and refunds. The variable consideration includes reductions in revenues for the accrual for reimbursement claims and settlements.

Classification	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2022	2021	2022	2021
Revenue from continuing operations	\$	104	\$	463
Revenue from discontinued operations		759		18,242
Total revenues	\$	863	\$	18,705
			\$	2,238
			\$	43,231

6. Balance Sheet Components

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following (in thousands):

	June 30, 2022	December 31, 2021
Prepaid expenses	\$ 7,615	\$ 6,123
Other current assets	1,060	1,109
Total	\$ 8,675	\$ 7,232

Property and Equipment, Net

Property and equipment, net consisted of the following (in thousands):

	June 30, 2022	December 31, 2021
Computers and software	\$ 3,533	\$ 5,004
Building and leasehold improvements	755	437
Laboratory equipment	1,568	2,688
Furniture, fixtures, and office equipment	1,310	1,142
Construction in progress	88	16
Land	346	346
Total property and equipment	7,600	9,633
Less accumulated depreciation and amortization	(5,146)	(5,621)
Property and equipment, net	\$ 2,454	\$ 4,012

Depreciation expense included in continuing operations was \$0.2 million and \$0.5 million for the three and six months ended June 30, 2022, respectively, and \$0.5 million and \$1.0 million for the three and six months ended June 30, 2021, respectively.

Other Assets

Other assets consisted of the following (in thousands):

	June 30, 2022	December 31, 2021
Investment in Enumera	\$ 6,000	\$ —
Other	227	326
Total	<u>\$ 6,227</u>	<u>\$ 326</u>

Intangible Assets, Net

All intangible assets were included as part of the sale of Avero in December 2021 (see Note 4) and there was no amortization expense for the three and six months ended June 30, 2022. Amortization expense was \$0.2 million and \$0.5 million for the three and six months ended June 30, 2021, respectively, and is included in discontinued operations.

Accrued Expenses and Other Current Liabilities

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

	June 30, 2022	December 31, 2021
Accrual for reimbursement claims and settlements, current ⁽¹⁾	\$ 17,961	\$ 18,127
Commissions and bonuses	1,195	3,883
Vacation and payroll benefits	3,908	6,894
Accrued professional services	260	652
Accrued interest	846	802
Lease liabilities, current	1,468	—
Insurance financing	3,165	489
Contract liabilities	89	301
Other ⁽²⁾	2,048	3,009
Total	<u>\$ 30,940</u>	<u>\$ 34,157</u>

(1) All of the Company's revenues related to Laboratory Operations have been discontinued; amounts related to the revenue reserve generated from the Laboratory Operations remain on the balance sheet.

(2) Included in this amount are contracts that the Company will be responsible for that cannot be terminated; as there is no future benefit to the Company, they were expensed in discontinued operations in 2021.

Other Long-term Liabilities

Other long-term liabilities consisted of the following (in thousands):

	June 30, 2022	December 31, 2021
Accrual for reimbursement claims and settlements, net of current portion ⁽¹⁾	\$ 192	\$ 192
Lease liabilities, net of current portion	680	—
Other ⁽²⁾	4,665	5,622
Total	<u>\$ 5,537</u>	<u>\$ 5,814</u>

(1) All of the Company's revenues related to Laboratory Operations have been discontinued; amounts related to the revenue reserve generated from the Laboratory Operations remain on the balance sheet.

(2) Included in this amount are contracts that the Company will be responsible for that cannot be terminated; as there is no future benefit to the Company, they were expensed in discontinued operations in 2021.

7. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the measurement date. The authoritative guidance establishes a three-level valuation hierarchy that prioritizes the inputs to valuation techniques used to measure fair value based upon whether such inputs are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect market assumptions made by the reporting entity. This hierarchy requires the Company to use observable market data, when available, and to

minimize the use of unobservable inputs when determining fair value. The three-level hierarchy for the inputs to valuation techniques is summarized as follows:

Level 1 - Quoted prices in active markets for identical assets and liabilities that the Company has the ability to access.

Level 2 - Observable market-based inputs or unobservable inputs that are corroborated by market data, such as quoted prices, interest rates, and yield curves.

Level 3 - Inputs that are unobservable data points that are not corroborated by market data.

There were no significant transfers between these fair value measurement classifications during the six months ended June 30, 2022 and 2021.

Fair Value of Financial Instruments

The Company's Level 3 liabilities consist of the embedded derivative liability associated with the Company's Convertible Notes (see Note 8) and the warrant liability resulting from the August 2021 issuance of warrants (see Note 11). The Convertible Notes conversion feature was bifurcated and recorded as an embedded derivative liability with a corresponding discount at the date of issuance that is netted against the principal amount of the Convertible Notes. The Company utilizes a Monte Carlo simulation method to determine the fair value of the conversion feature, which utilizes inputs including the common stock price, volatility of common stock, the risk-free interest rate and the probability of conversion to common shares at the conversion rate in the event of a major transaction (e.g. a change in control). Due to the use of significant unobservable inputs, the overall fair value measurement of the conversion feature is classified as Level 3. As of both June 30, 2022 and December 31, 2021, the fair value of the embedded derivative liability was zero.

The Company uses the Black-Scholes Model to value the Level 3 warrant liability at inception and on subsequent valuation dates. This model incorporates transaction details such as the Company's stock price, contractual terms, maturity, risk free rates, and volatility. The significant unobservable input for the Level 3 warrant liability includes volatility. Given the limited period of time the Company's stock has been traded in an active market, the expected volatility is estimated by taking the average historical price volatility for industry peers, consisting of several public companies in the Company's industry that are similar in size, stage, or financial leverage, over a period of time commensurate to the expected term of the warrants. At June 30, 2022, the fair value of the warrant liability was estimated using the Black-Scholes Model with the following inputs and assumptions:

	<u>June 30,</u> <u>2022</u>	
Risk-free interest rate	3.01 %	
Expected volatility	103.6 %	
Stock price	\$ 0.70	
Expected life (years)	4.1	

The following table presents information about the Company's assets and liabilities that are measured at fair value on a recurring basis and indicates the fair value hierarchy of the valuation techniques utilized to determine such fair value (in thousands):

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
June 30, 2022			
Money market funds ⁽¹⁾	\$ 48,202	\$ —	\$ —
Warrant liability	\$ —	\$ —	\$ 5,329
December 31, 2021			
Money market funds ⁽¹⁾	\$ 85,866	\$ —	\$ —
Warrant liability	\$ —	\$ —	\$ 18,731

(1) Included in cash and cash equivalents in the accompanying condensed consolidated balance sheets.

The carrying value of the Company's Convertible Notes does not approximate its fair value because the carrying value of the Convertible Notes reflects the balance of unamortized discount related to the derivative liability associated with the value of the conversion feature assessed at inception. The carrying value of the Company's Convertible Notes, net of discount, was \$127.1 million and \$126.4 million at June 30, 2022 and December 31, 2021, respectively. Based on unadjusted quoted prices in active market obtained from third-party pricing services, the Company determined the fair value of the Convertible Notes was \$84.2 million and \$86.6 million as of June 30, 2022 and December 31, 2021, respectively.

8. Convertible Notes

In December 2020, the Company issued a total of \$168.5 million principal amount of Convertible Notes in a private offering of the Convertible Notes pursuant to Rule 144A under the Securities Act of 1933, as amended (the "Securities Act"). The Convertible Notes were issued pursuant to, and are governed by, an indenture, dated as of December 7, 2020, by and between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee ("Indenture"). The Convertible Notes are due on December 1, 2025, unless earlier repurchased, redeemed or converted, and accrue interest at a rate per annum equal to 7.25% payable semi-annually in arrears on June 1 and December 1 of each year, with the initial payment on June 1, 2021. The Company recognized interest expense on the Convertible Notes of \$2.4 million and \$4.8 million during the three and six months ended June 30, 2022, respectively, and \$3.1 million and \$6.2 million during the three and six months ended June 30, 2021, respectively.

The Convertible Notes are the Company's senior, unsecured obligations and are (i) equal in right of payment with the Company's existing and future senior, unsecured indebtedness; (ii) senior in right of payment to the Company's existing and future indebtedness that is expressly subordinated to the Convertible Notes; (iii) effectively subordinated to the Company's existing and future secured indebtedness, to the extent of the value of the collateral securing that indebtedness; and (iv) structurally subordinated to all existing and future indebtedness and other liabilities, including trade payables, and (to the extent the Company is not a holder thereof) preferred equity, if any, of the Company's subsidiaries.

At any time, noteholders may convert their Convertible Notes at their option into shares of the Company's common stock, together, if applicable, with cash in lieu of any fractional share, at the then-applicable conversion rate. The initial conversion rate is 278.0094 shares of common stock per \$1,000 principal amount of Convertible Notes, which represents an initial conversion price of approximately \$3.60 per share of common stock. Noteholders that convert their Convertible Notes before December 1, 2022 will, in certain circumstances, be entitled to an additional cash payment representing the present value of any remaining interest payments on the Convertible Notes through December 1, 2022. The conversion rate and conversion price are subject to customary adjustments upon the occurrence of certain dilutive events. In addition, if certain corporate events that constitute a "Make-Whole Fundamental Change" (as defined in the Indenture) occur, then the conversion rate will, in certain circumstances, be increased for a specified period of time.

The Convertible Notes are redeemable, in whole and not in part, at the Company's option at any time on or after December 1, 2023, at a cash redemption price equal to the principal amount of the Convertible Notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date, but only if the last reported sale price per share of the Company's common stock exceeds 130% of the conversion price on (i) each of at least 20 trading days, whether or not consecutive, during the 30 consecutive trading days ending on, and including, the trading day immediately before the date the Company sends the related redemption notice; and (ii) the trading day immediately before the date the Company sends such notice. In addition, calling the Convertible Notes will constitute a Make-Whole Fundamental Change, which will result in an increase to the conversion rate in certain circumstances for a specified period of time.

The Convertible Notes have customary provisions relating to the occurrence of "Events of Default" (as defined in the Indenture), which include the following: (i) certain payment defaults on the Convertible Notes (which, in the case of a default in the payment of interest on the Convertible Notes, will be subject to a 30-day cure period); (ii) the Company's failure to send certain notices under the Indenture within specified periods of time; (iii) the Company's failure to comply with certain covenants in the Indenture relating to the Company's ability to consolidate with or merge with or into, or sell, lease or otherwise transfer, in one transaction or a series of transactions, all or substantially all of the assets of the Company and its subsidiaries, taken as a whole, to another person; (iv) a default by the Company in its other obligations or agreements under the Indenture or the Convertible Notes if such default is not cured or waived within 60 days after notice is given in accordance with the Indenture; (v) certain defaults by the Company or any of its subsidiaries with respect to indebtedness for borrowed money of at least \$7.5 million; (vi) the rendering of certain judgments against the Company or any of its subsidiaries for the payment of at least \$7.5 million, where such judgments are not discharged or stayed within 60 days after the date on which the right to appeal has expired or on which all rights to appeal have been extinguished; and (vii) certain events of bankruptcy, insolvency and reorganization involving the Company or any of the Company's significant subsidiaries. As of both June 30, 2022 and December 31, 2021, the Company was in compliance with all such covenants.

The Convertible Notes have a conversion option which was required to be bifurcated upon issuance and periodically remeasured to fair value separately as an embedded derivative. The conversion option includes additional interest payments payable to the noteholders if converted prior to December 1, 2022. The conversion feature was bifurcated and recorded separately as an embedded derivative as (1) the conversion feature is not clearly and closely related to the debt instrument and is not considered to be indexed to the Company's equity, (2) the conversion feature standing alone meets the definition of a derivative, and (3) the Convertible Notes are not remeasured at fair value each reporting period with changes in fair value recorded in the consolidated statement of operations.

As of both June 30, 2022 and December 31, 2021, the fair value of the derivative liability was zero. The prior year change in fair value of the derivative liability of \$18.0 million is included in other income, net in the condensed consolidated statement of operations for the six months ended June 30, 2021. As of June 30, 2022 and December 31, 2021, the unamortized debt discount was \$5.6 million and \$6.3 million, respectively. The Company amortizes the debt discount using the effective interest method over the term of the Convertible Notes, resulting in an effective interest rate of approximately 8.7%. The amortization of the Convertible Notes debt discount was \$0.4 million and \$0.7 million for the three and six months ended June 30, 2022, respectively, and \$0.4 million and \$0.8 million for the three and six months ended June 30, 2021, respectively, and was included in interest income (expense), net in the condensed consolidated statements of operations.

9. Related Party Transactions

As of June 30, 2022 and December 31, 2021, a private equity firm held 22,394,074 shares, or 11.8%, and 28,935,134 shares, or 15.6%, respectively, of the Company's common stock outstanding and warrants to purchase up to 8,097,166 shares of common stock at an exercise price of \$2.84. This private equity firm also holds \$103.5 million aggregate principal amount of Convertible Notes as of both June 30, 2022 and December 31, 2021 (see Note 8). As of June 30, 2022 and December 31, 2021, the accrued interest expense related to the Convertible Notes held by this private equity firm was \$0.6 million and \$0.6 million, respectively.

10. Commitments and Contingencies

Operating Leases

The Company has entered into various noncancelable operating lease agreements, primarily for office space, laboratory space, and equipment. On January 1, 2022, the Company adopted ASC Topic 842, *Leases*. Results for reporting periods beginning after January 1, 2022 are presented under ASC 842, while prior period amounts are not adjusted and continue to be reported in accordance with historic accounting guidance. The right-of-use assets were \$2.2 million as of June 30, 2022 and lease liabilities are recorded in accrued expenses and other current liabilities and other long-term liabilities on the condensed consolidated balance sheet and were \$1.5 million and \$0.7 million, respectively, as of June 30, 2022.

Operating lease costs were \$0.4 million and \$0.7 million for the three and six months ended June 30, 2022, respectively, and cash paid for operating leases was \$0.4 million for the six months ended June 30, 2022. The weighted-average discount rate used was 7.8% and the weighted-average remaining lease term for all operating leases was 2.20 years. Rent expense included in continuing operations for operating leases was \$1.7 million and \$3.1 million for the three and six months ended June 30, 2021, respectively.

As of June 30, 2022, future lease payments under the non-cancelable operating leases were as follows (in thousands):

Year ending December 31,	Minimum Operating Lease Payments
Remainder of 2022	\$ 729
2023	965
2024	235
2025	209
2026 and thereafter	233
Total minimum lease payments	2,371
Less: interest	(223)
Present value of lease liabilities	<u>\$ 2,148</u>

As of December 31, 2021, net minimum payments under the non-cancelable operating leases were as follows (in thousands):

Year ending December 31,	Minimum Operating Lease Payments
2022	\$ 2,141
2023	1,086
2024	237
2025	208
2026 and thereafter	251
Total future minimum lease payments	<u>\$ 3,923</u>

Contingencies

The Company, in the ordinary course of its business, can be involved in lawsuits, threats of litigation, and audit and investigative demands from third parties. While management is unable to predict the exact outcome of such matters, it is management's current belief that any potential liabilities of Avero or Progenity resulting from these contingencies, individually or in the aggregate, could have a material impact on the Company's financial position and results of operations.

The regulations governing government reimbursement programs (e.g., Medicaid, Tricare, and Medicare) and commercial payor reimbursement programs are complex and may be subject to interpretation. As a former provider of services to patients covered under government and commercial payor programs, post payment review audits, and other forms of reviews and investigations are routine. The Company believes it complies in all material respects with the statutes, regulations, and other requirements applicable to its laboratory operations.

Federal Investigations

In April 2018, the Company received a civil investigative demand from an Assistant U.S. Attorney ("AUSA") for the Southern District of New York ("SDNY") and a Health Insurance Portability and Accountability Act subpoena issued by an AUSA for the Southern District of California ("SDCA") around legacy commercial practices. In May 2018, the Company received a subpoena from the State of New York Medicaid Fraud Control Unit.

On July 21, 2020, July 23, 2020 and October 1, 2020, the Company entered into agreements (the "Agreements") with certain governmental agencies and the 45 states participating in the settlement ("State AGs") to resolve, with respect to such agencies and State AGs, all of such agencies' and State AGs' outstanding civil, and, where applicable, federal criminal investigations described above. The remaining amounts payable to the government will be subject to interest at a rate of 1.25% per annum, and any or all amounts may be paid earlier at the option of the Company. The Company did not make any payments during the six months ended June 30, 2022 and 2021. As of both June 30, 2022 and December 31, 2021, the Company's accrual consists of \$6.9 million in accrued expenses and other current liabilities and \$0.2 million in other long-term liabilities.

Furthermore, the Company has agreed that, if during calendar years 2020 through 2023, and so long as amounts payable to the government remain unpaid, the Company receives any civil settlement, damages awards, or tax refunds, to the extent that the amounts exceed \$5.0 million in a calendar year, it will pay 26% of the amount received in such civil settlement, damages award, or tax refunds as an accelerated payment of the scheduled amounts set forth above, up to a maximum total acceleration of \$4.1 million. The Company did not receive any tax refunds during the six months ended June 30, 2022 and 2021.

Non-Prosecution Agreement

Effective July 21, 2020, the Company entered into the Non-Prosecution Agreement, pursuant to which the Company agreed with the DOJ to (i) pay the restitution provided for under the SDCA Civil Settlement Agreement, (ii) not commit any felonies, (iii) continue to implement a compliance and ethics program designed to prevent and detect violations of applicable fraud and kickback laws throughout its operations and (iv) fulfill certain other disclosure, reporting and cooperation obligations. The DOJ agreed that it will not prosecute the Company for any conduct described in the Non-Prosecution Agreement provided that the Company performs its obligations under the Non-Prosecution Agreement during the period from July 21, 2020 through July 21, 2021. The Non-Prosecution Agreement expired on July 21, 2021.

Corporate Integrity Agreement

In connection with the resolution of the investigated matters, and in exchange for the Office of Inspector General of the Department of Health and Human Services ("OIG") agreement not to exercise its authority to permissively exclude the Company from participating in federal healthcare programs, effective July 21, 2020, the Company entered into a five-year Corporate Integrity Agreement with the OIG. The Corporate Integrity Agreement requires, among other matters, that the Company maintain a Compliance Officer, a Compliance Committee, board review and oversight of certain federal healthcare compliance matters, compliance programs, and disclosure programs; provide management certifications and compliance training and education; engage an independent review organization to conduct claims and arrangements reviews; and implement a risk assessment and internal review process. In view of the Strategic Transformation, including cessation of its Laboratory Operations, effective March 16, 2022 the OIG agreed to suspend the Company's obligations under the Corporate Integrity Agreement except for the Company's obligation to continue its engagement of an independent review organization to conduct billing claims reviews and reporting of those reviews to OIG with respect to ongoing reimbursement payments being received from federal healthcare programs for historical laboratory services performed by the Company prior to the Company's cessation of services in the summer of 2021. The Company's failure to comply with its remaining obligations under the Corporate Integrity Agreement could result in monetary penalties and/or the Company being excluded from participating in federal healthcare programs.

Colorado Recoupment

On July 21, 2021, the Company received a letter from the Colorado Department of Health Care Policy and Financing (the "Department"), informing the Company that, as a result of a post-payment review of Medicaid claims from October 2014 to June 2018, the Department is seeking recoupment for historical payments in an aggregate amount of approximately \$5.7 million. In December 2021, the Company received additional correspondence informing them that the Department is seeking recoupment for an additional \$3.3 million of historical payments from 2018. The historical payments for which the Department is seeking recoupment primarily relate to the Company's Preparent expanded carrier screening tests primarily on the basis that such tests were not medically necessary.

The Company previously entered into settlement agreements with 45 states including the State of Colorado as part of a settlement with respect to certain civil claims related to the Company's discontinued legacy billing practices for its non-invasive prenatal tests ("NIPT") and microdeletion tests and the provision of alleged kickbacks or inducements to physicians and patients.

The Company has disputed these claims of recoupment with the Department, filed administrative complaints with the State of Colorado Office of Administrative Courts, and also seeks to offset such claims by an amount of approximately \$1.9 million previously paid to the Department in connection with the state settlement agreements referred to above. At this preliminary stage, the Company is unable to predict the ultimate outcome of this action, and therefore cannot estimate the reasonably possible loss or range of loss, if any, that may result from this action.

California Subpoena

On July 19, 2021, the Company received a subpoena from the California Attorney General's Office, Division of Public Rights, requesting documents and information related to the Company's former genetic testing practices, including NIPT, particularly those with a nexus to California patients. The subpoena is captioned "In the Matter of the Investigation of: Prenatal Genetic Testing Companies." The Company continues to cooperate and provide information requested by the subpoena. Based upon discussions with the California Attorney General's Office, we believe the focus of the investigation is potential consumer protection claims related to billing of patient co-pays. The investigation thus remains ongoing, and it is not possible to predict an outcome at this time.

Payor Settlement Agreements

In November 2019, the Company and Aetna entered into a settlement agreement for \$15.0 million. The Aetna settlement obligation was fully settled during the three months ended March 31, 2021.

On September 30, 2019, the Company entered into a settlement agreement with United HealthCare Services, Inc. and UnitedHealthcare Insurance Company in which the Company agreed to pay an aggregate amount of \$30.0 million. As of December 31, 2021 the settlement has been fully paid.

Payor Dispute

On November 16, 2020, the Company received a letter from Anthem, Inc. ("Anthem") informing the Company that Anthem is seeking recoupment for historical payments made by Anthem in an aggregate amount of approximately \$27.4 million. The historical payments for which Anthem is seeking recoupment are claimed to relate primarily to discontinued legacy billing practices for the Company's former NIPT and microdeletion tests and secondarily to the implementation of the new CPT code for reimbursement for the Company's former Preparent expanded carrier screening tests.

The Company has historically negotiated and settled similar claims with third-party payors. Although the Company's practice in resolving disputes with other similar large commercial payors has generally led to agreed settlement amounts substantially less than the originally claimed amount, there can be no assurance that the Company will be successful in a similar settlement amount in any ongoing or future dispute. Historical settlement amounts and payment time periods may not be indicative of the final settlement terms with Anthem, if any. Management disputes this claim of recoupment with Anthem in substantial part based on expired statutes of limitations and seeks to offset any amounts owed by Anthem to the Company. The Company has an accrual for the estimated probable loss for this matter as of June 30, 2022 and December 31, 2021.

Payor Recoveries

As noted above, the regulations governing government reimbursement programs (e.g., Medicaid, Tricare, and Medicare) and commercial payor reimbursement programs are complex and may be subject to interpretation. As a former provider of services to patients covered under government reimbursement and commercial payor programs, the Company is routinely subject to post-payment review audits and other forms of reviews and investigations. For example, the Company is currently in the process of reviewing

several managed Medicaid payor recoupment requests aggregating to \$1.1 million. If a third-party payor successfully challenges that a payment to the Company for prior testing was in breach of contract or otherwise contrary to policy or law, they may recoup such payment. The Company may also decide to negotiate and settle with a third-party payor in order to resolve an allegation of overpayment. In the ordinary course of business, the Company addresses and evaluates a number of such claims from payors. In the past, the Company has negotiated and settled these types of claims with third-party payors. The Company may be required to resolve further disputes in the future. While management is unable to predict the exact outcome of any such claims, it is management's current belief that any potential liabilities resulting from these contingencies, individually or in the aggregate, could have a material impact on the Company's financial position and results of operations.

OIG Inquiry

On October 16, 2019, the Company received an inquiry from the Texas Health & Human Services Commission Office of Inspector General ("TX OIG") alleging that the Company did not hold the required CLIA Laboratory Certificate of Accreditation to perform, bill for, or be reimbursed by the Texas Medicaid Program for certain tests performed by us from January 1, 2015 through December 31, 2018. The Company submitted a written response to the inquiry on October 23, 2019. In October 2021, the Company received a letter from the TX OIG asking the Company to renew its engagement on the matter. The Company continues to cooperate with TX OIG toward resolution of the matter. Although management believes that the Company holds and have held all required CLIA certificates and/or subcontract with third-party laboratories that hold and have held such certificates to perform all of the tests subject to the TX OIG inquiry, there can be no assurance that the TX OIG will agree with this position. The Company has recorded an accrual of \$0.4 million for the estimated probable loss for this matter as of June 30, 2022 and December 31, 2021.

Ravgen Lawsuit

On December 22, 2020, Ravgen, Inc. ("Ravgen") filed suit in the District of Delaware (D. Del. Civil Action No. 1:20-cv-1734) asserting the Company's infringement of two Ravgen patents based on the Company's former NIPT testing business. The complaint seeks monetary damages and injunctive relief. The Company responded to the complaint on March 23, 2021. Management believes the claims in Ravgen's complaint are without merit, and the Company is vigorously defending against them. On March 1, 2022 the court ordered a stay of the litigation pending resolution of patent validity challenges made against the two patents in inter partes review proceedings currently pending before the Patent Trial and Appeal Board of the United States Patent and Trademark Office.

IPO Litigation

On June 23, 2020, the Company closed its IPO. Lawsuits were filed on August 28, 2020 and September 11, 2020 against the Company, certain of its executive officers and directors, and the underwriters of the IPO. On December 3, 2020, the U.S. District Court for the Southern District of California consolidated the two actions, appointed Lin Shen, Lingjun Lin and Fusheng Lin to serve as Lead Plaintiffs, and approved Glancy Prongay & Murray LLP to be Lead Plaintiffs' Counsel. Lead Plaintiffs filed their first amended complaint on February 4, 2021. Together with the underwriters of the IPO, the Company moved to dismiss the first amended complaint. On September 1, 2021, the court granted the Company's motion to dismiss, dismissing Lead Plaintiffs' claims without prejudice. On September 22, 2021, Lead Plaintiffs filed their second amended complaint. It alleges that the Company's registration statement and related prospectus for the IPO contained false and misleading statements and omissions in violation of the Securities Act by failing to disclose that (i) the Company had overbilled government payors for Preparent tests beginning in 2019 and ending in or before early 2020; (ii) there was a high probability that the Company had received, and would have to refund, a material amount of overpayments from government payors for Preparent tests; (iii) in February 2020 the Company ended a supposedly improper marketing practice on which the competitiveness of the Company's business depended; and (iv) the Company was suffering from material negative trends with respect to testing volumes, average selling prices for its tests, and revenues. Lead Plaintiffs seek certification as a class, unspecified compensatory damages, interest, costs and expenses including attorneys' fees, and unspecified extraordinary, equitable, and/or injunctive relief. Together with the underwriters of the IPO, the Company moved to dismiss the second amended complaint on November 15, 2021. Lead Plaintiffs filed an opposition to the motion on January 14, 2022, and the Company filed a reply in support of the motion on February 22, 2022. The Company intends to continue to vigorously defend against these claims. Subject to a reservation of rights, the Company is advancing expenses subject to indemnification to the underwriters of the IPO.

On June 4, 2021, a purported shareholder filed a lawsuit in the U.S. District Court for the Southern District of California, claiming to sue derivatively on behalf of the Company. The complaint names certain of the Company's officers and directors as defendants, and names the Company as a nominal defendant. Premised largely on the same allegations as the above-described securities lawsuit, it alleges that the individual defendants breached their fiduciary duties to the Company, wasted corporate assets, and caused the Company to issue a misleading proxy statement in violation of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The complaint seeks the award of unspecified damages to the Company, equitable and injunctive remedies, and an order directing the Company to reform and improve its internal controls and board oversight. It also seeks the costs and disbursements associated with bringing suit, including attorneys', consultants', and experts' fees. The case is stayed pending the outcome of the motion to dismiss in the above-described securities lawsuit. The Company intends to vigorously defend against these claims.

On August 17, 2021, the Company received a letter purportedly on behalf of a stockholder of the Company demanding that the Company's Board of Directors investigate and take action against certain of the Company's current and former officers and directors to recover damages for alleged breaches of fiduciary duties and related claims arising out of the IPO litigation discussed above. This matter is pending the outcome of the companion securities litigation.

Given the uncertainty of litigation, the preliminary stages of the litigation and other matters described above, and the legal standards that must be met for, among other things, success on the merits, the Company is unable to predict the ultimate outcome of these actions, and therefore cannot estimate the reasonably possible loss or range of loss, if any, that may result from these actions.

11. Stockholders' Equity

Common Stock

Pursuant to the Company's eighth amended and restated certificate of incorporation, which went into effect immediately prior to the completion of the IPO, the Company is authorized to issue 350,000,000 shares of common stock and 10,000,000 shares of undesignated preferred stock. Each holder of common stock is entitled to one vote per share of common stock held. On June 18, 2020, the Company completed its IPO.

In February 2021, the Company entered into a Securities Purchase Agreement for a private placement with certain institutional and accredited investors ("February Purchasers"). Pursuant to the Securities Purchase Agreement, the February Purchasers purchased an aggregate of 4,370,629 units ("February Units"), representing (i) 4,370,629 shares of the Company's common stock and (ii) warrants to purchase up to 4,370,629 shares of common stock. The purchase price for each February Unit was \$5.72, for an aggregate purchase price of approximately \$25.0 million. The warrants are exercisable for cash at an exercise price of \$6.86 per share, subject to adjustments as provided under the terms of the warrants. The warrants are exercisable at any time for cash and expire on the fifth anniversary of the date of issuance.

Pursuant to ASC 815-40, *Derivatives and Hedging – Contracts in Entity's Own Equity* ("ASC 815"), the Company deemed the warrants to be liability classified and allocated the proceeds from issuance between the warrants and common stock using the with-and-without method. \$12.8 million of the proceeds, equal to the fair value of the warrants determined using the Black-Scholes Model, were allocated to the warrant liability, and the remaining proceeds of \$12.2 million were allocated to the common stock. The Company incurred a total of \$1.4 million in issuance costs, which were allocated between the warrants and common stock on a relative fair value basis, \$0.5 million and \$0.9 million, respectively. The warrant liability was remeasured at \$10.2 million as of March 31, 2021 and the Company recognized a gain on warrant liability in the amount of \$2.6 million associated with this transaction during the three months ended March 31, 2021. On April 1, 2021, the registration statement to register the shares of common stock underlying the warrants was declared effective by the SEC. As a result, the warrants met the conditions to be classified in equity and the related warrant liability was reclassified from liability to equity on April 1, 2021.

In June 2021, the Company entered into a Securities Purchase Agreement for a private placement with certain institutional and accredited investors ("June Purchasers"). Pursuant to the Securities Purchase Agreement, the June Purchasers purchased an aggregate of 16,194,332 units ("June Units"), representing (i) 15,694,332 shares of the Company's common stock (ii) warrants to purchase up to 16,194,332 shares of common stock and (iii) pre-funded warrants to purchase up to 500,000 shares of common stock. The purchase price for each June Unit was \$2.47, for an aggregate purchase price of approximately \$40.0 million. The warrants are exercisable for cash at an exercise price of \$2.84 per share, subject to adjustments as provided under the terms of the warrants. The warrants are exercisable at any time and expire on the fifth anniversary of the date of issuance. The pre-funded warrants are exercisable at an exercise price of \$0.001 per share and have no expiration date. In July 2021, the Company issued 500,000 shares of common stock as a result of the exercise of the outstanding pre-funded warrants at an exercise price of \$0.001 per share.

Pursuant to ASC 815, the Company deemed the warrants to be liability classified and allocated the proceeds from issuance between the warrants and common stock using the with-and-without method. \$26.6 million of the proceeds, equal to the fair value of the warrants determined using the Black-Scholes Model, were allocated to the warrant liability, and the remaining proceeds of \$13.4 million were allocated to the common stock. The Company incurred a total of \$2.1 million in issuance costs, which were allocated between the warrants and common stock on a relative fair value basis, \$0.7 million and \$1.4 million, respectively. The warrant liability was remeasured at \$31.8 million as of June 30, 2021 and the Company recognized a loss on warrant liability in the amount of \$5.1 million in the condensed consolidated statements of operations during the three months ended June 30, 2021. On June 30, 2021, the registration statement to register the shares of common stock underlying the warrants was declared effective by the SEC. As a result, the warrants met the conditions to be classified in equity and the related warrant liability was reclassified from liability to equity on June 30, 2021.

In August 2021, the Company issued and sold an aggregate of (i) 40,000,000 shares of common stock and (ii) warrants to purchase 40,000,000 shares of common stock in an underwritten public offering. Each share was sold together with one warrant to purchase one share of common stock at a combined public offering price of \$1.00 per share of the common stock and the accompanying warrant. The warrants have an exercise price of \$1.00 per share, are exercisable at any time, and will expire five years following the date of issuance. In addition, the Company granted the underwriter a 30-day option to purchase up to 6,000,000 shares of common stock ("Overallotment Stock Option") and/or warrants to purchase 6,000,000 shares of common stock ("Overallotment Warrant Option") at a price of \$0.99 per share of common stock and/or \$0.01 per warrant. The warrants and Overallotment Warrant Options were issued in the money based on the public offering terms. The Company received approximately \$37.4 million in net proceeds, after deducting underwriting discounts and commissions and other offering expenses payable by the Company.

Pursuant to ASC 815, the Company deemed the Overallotment Stock Option to meet the scope exception for equity classification, and the warrants and Overallotment Warrant Option to be classified as a liability (collectively "the Warrant Liability") at fair value initially with subsequent changes in fair value recorded in earnings. The warrants were recorded at a fair value of \$41.8 million and the Overallotment Warrant Option at a fair value of \$6.2 million, both determined using the Black-Scholes Model. As the total fair value of the Warrant Liability exceeds the total proceeds of \$37.4 million, the Company recorded a loss of the \$8.1 million excess to loss on warrant liability in the condensed consolidated statements of operations. Accordingly, there were no proceeds allocated to the common stock issued or the Overallotment Stock Option granted as part of this transaction. The Company incurred a total of \$2.8 million in issuance costs, which were allocated between the warrants, Overallotment Warrant Option, common stock and Overallotment Stock Option on a relative fair value basis and expensed in the condensed consolidated statements of operations.

The Overallotment Warrant Option was partially exercised in August for warrants to purchase an aggregate of 1,932,000 shares of common stock and the Company recognized a gain on the warrant liability in the amount of \$3.4 million in the condensed consolidated statements of operations. The remaining Overallotment Warrant Option expired in September 2021 and the Company recognized a gain of \$1.9 million in the condensed consolidated statements of operations. The Warrant Liability was remeasured at \$18.7 million as of December 31, 2021 and the Company recognized a loss on warrant liability in the amount of \$6.7 million in the condensed consolidated statements of operations. The Warrant Liability was remeasured at \$5.3 million as of June 30, 2022 and the Company recognized a gain on warrant liability in the amount of \$13.4 million in the condensed consolidated statements of operations during the six months ended June 30, 2022.

In October 2021, the Company entered into a securities purchase agreement with certain institutional and accredited investors for the purchase and sale of 13,333,334 shares of the Company's common stock, at a purchase price of \$1.50 per share in a registered direct offering. The Company received approximately \$18.7 million in net proceeds, after deducting placement agent fees and other offering expenses payable by the Company.

During the year ended December 31, 2021, the Company issued 28,684,125 shares of common stock as a result of the exercise of outstanding warrants at an exercise price of \$1.00 per share for proceeds of \$28.7 million.

In November 2021, the Company entered into an At Market Issuance Sales Agreement ("ATM Sale Agreement") with B. Riley Securities, Inc., BTIG, LLC, and H.C. Wainwright & Co. LLC ("Agents"), pursuant to which the Company may offer and sell shares of common stock having an aggregate offering price of up to \$90,000,000, from time to time, in "at the market" offerings through the Agents. Sales of the shares of common stock, if any, will be made at prevailing market prices at the time of sale, or as otherwise agreed with the Agents. The Agents will receive a commission from the Company of up to 3.0% of the gross proceeds of any shares of common stock sold under the ATM Sale Agreement. During the three months ended June 30, 2022, the Company received net proceeds of \$1.1 million, after deducting commissions and other offering expenses, from the sale of 1,599,652 shares under the ATM Sale Agreement. The Company sold such shares at a weighted average purchase price of \$0.70 per share.

12. Stock-Based Compensation

On May 5, 2021, holders of a majority of the outstanding common stock executed a written consent approving the Fourth Amended and Restated 2018 Equity Incentive Plan ("2018 Fourth Amended Plan"), which provides for an automatic annual increase in the number of shares of common stock reserved for issuance. As of June 30, 2022, 10,726,193 shares were available for issuance under the 2018 Fourth Amended Plan.

On November 3, 2021, the Board of Directors approved and adopted the Company's 2021 Inducement Plan ("2021 Inducement Plan") to provide for the reservation of 6,500,000 shares of the Company's common stock to be used exclusively for the grant of awards to individuals not previously an employee or non-employee director of the Company. As of June 30, 2022, 2,594,880 shares were available for grant under the 2021 Inducement Plan.

Stock Options

The following table summarizes stock option activity, which includes Performance Awards, under the 2012 Plan, the 2015 Plan, the 2018 Fourth Amended Plan and the 2021 Inducement Plan during the six months ended June 30, 2022:

	Stock Options Outstanding	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Balance at December 31, 2021	8,640,951	\$ 4.74		
Options granted	8,828,368	\$ 0.84		
Options exercised	—	—		
Options forfeited/cancelled	(1,678,488)	\$ 3.48		
Options expired	(692,913)	\$ 6.23		
Balance at June 30, 2022	<u>15,097,918</u>	\$ 2.53	8.64	\$ 48
Vested and expected to vest at June 30, 2022	<u>15,097,918</u>	\$ 2.53	8.60	\$ 48
Vested and exercisable at June 30, 2022	<u>3,113,396</u>	\$ 5.72	4.74	\$ —

The aggregate intrinsic value in the above table is calculated as the difference between the closing price of the Company's common stock at June 30, 2022 of \$0.70 per share and the exercise price of stock options that had strike prices below the closing price. There were no stock options exercised during the six months ended June 30, 2022.

The Company uses the Black-Scholes option pricing model to estimate the fair value of each option grant on the date of grant or any other measurement date. The following table sets forth the assumptions used to determine the fair value of stock options granted during the six months ended June 30, 2022:

Risk-free interest rate	2.0% - 3.6%
Expected volatility	90.7% - 101.3%
Expected dividend yield	—%
Expected life (years)	5.5 - 6.3 years

The weighted-average grant date fair value of options granted during the six months ended June 30, 2022 and 2021 was \$0.77 per option and \$2.13 per option, respectively.

Restricted Stock Units

The following table summarizes RSU activity for the six months ended June 30, 2022:

	Number of Shares	Weighted- Average Grant Date Fair Value
Balance at December 31, 2021	3,879,110	\$ 3.80
Granted	5,277,244	\$ 0.84
Vested	(604,689)	\$ 4.04
Forfeited/cancelled	(1,048,215)	\$ 3.49
Balance at June 30, 2022	<u>7,503,450</u>	<u>\$ 1.74</u>

2020 Employee Stock Purchase Plan

In June 2020, the Company's board of directors adopted the ESPP with 510,000 shares of common stock reserved for future issuance under the ESPP. The ESPP also provides for automatic annual increases in the number of shares of common stock reserved for issuance. As of June 30, 2022 there were 1,225,918 total shares of common stock reserved for future issuance.

Stock-Based Compensation Expense

The following table presents total stock-based compensation expense included in each functional line item in the accompanying condensed consolidated statements of operations (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Research and development	\$ 26	\$ 1,080	\$ 363	\$ 1,675
Selling, general and administrative	1,420	2,310	3,136	3,950
Discontinued operations	—	1,080	—	1,475
Total stock-based compensation expense	<u>\$ 1,446</u>	<u>\$ 4,470</u>	<u>\$ 3,499</u>	<u>\$ 7,100</u>

At June 30, 2022 there was \$13.0 million of compensation cost related to unvested stock options expected to be recognized over a remaining weighted average vesting period of 3.26 and \$11.5 million of compensation cost related to unvested RSUs expected to be recognized over a remaining weighted average vesting period of 3.46 years.

13. Income Taxes

The Company calculates its interim income tax provision in accordance with ASC Topic 270, *Interim Reporting*, and ASC Topic 740, *Accounting for Income Taxes*. At the end of each interim period, management estimates the annual effective tax rate and applies such rate to the Company's ordinary quarterly earnings to calculate income tax expense related to ordinary income. The Company's effective tax rate from continuing operations was 12.2% and 3.9% for the three and six months ended June 30, 2022, respectively, and 0.0% for both the three and six months ended June 30, 2021. The change in the effective tax rate from June 30, 2021 to June 30, 2022 relates to federal and state income tax refunds. The Company's effective tax rate differs from the federal statutory rate of 21% in each period primarily due to the Company's net loss position and valuation allowance. The tax effects of items significant, unusual and infrequent in nature are discretely calculated and recognized in the period during which they occur.

The Company's NOL carryforwards and research and development expenditure credit carryforwards may be subject to an annual limitation under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the "Code"), and similar state provisions if the Company experiences an ownership change within the meaning of such Code sections. In general, an ownership change, as defined by Sections 382 and 383 of the Code, occurs when there is a 50 percentage points or more shift in ownership, consisting of shareholders owning more than 5% in the Company, occurring within a three-year testing period. The Company performed a formal study through the date of the IPO and determined future utilization of tax attribute carryforwards are not limited per Section 382 of the Internal Revenue Code. The Company has not updated its 382 study since the IPO offering in 2020. Any future changes may limit future utilization of tax attribute carryforwards. Due to the existence of the valuation allowance, limitations created by future ownership changes, if any, will not impact the Company's effective tax rate.

14. Net Loss Per Share

The table below provides potentially dilutive securities in equivalent common shares not included in the Company's calculation of diluted loss per share because to do so would be antidilutive:

	June 30, 2022	June 30, 2021
Options to purchase common stock	15,097,918	11,166,946
Restricted stock units	7,503,450	4,377,826
Common stock warrant	26,183,830	21,465,121
Common stock issuable upon conversion of Convertible Notes	40,588,672	50,856,253
Total	<u>89,373,870</u>	<u>87,866,146</u>

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

General

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our financial statements and notes thereto and other financial information included elsewhere in this Quarterly Report on Form 10-Q ("Quarterly Report") and the audited consolidated financial statements and notes thereto as of and for the year ended December 31, 2021 included in our Annual Report on Form 10-K ("Annual Report"). Unless the context requires otherwise, references in this Quarterly Report to “we,” “us,” and “our” refer to Biora Therapeutics, Inc.

This Quarterly Report includes forward-looking statements that involve a number of risks, uncertainties and assumptions. These forward-looking statements can generally be identified as such because the context of the statement will include words such as “may,” “will,” “intend,” “plan,” “believe,” “anticipate,” “expect,” “estimate,” “predict,” “potential,” “continue,” “likely,” “target,” “forecast,” or “opportunity,” the negative of these words or other similar words. Similarly, statements that describe our plans, strategies, intentions, expectations, objectives, goals or prospects and other statements that are not historical facts are also forward-looking statements. For such statements, we claim the protection of the Private Securities Litigation Reform Act of 1995. Readers of this Quarterly Report are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the time this Quarterly Report was filed with the SEC. These forward-looking statements are based largely on our expectations and projections about future events and future trends affecting our business, and are subject to risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. These risks and uncertainties include, without limitation, the risk factors identified below and those discussed in the section titled “Risk Factors” included under Part II, Item 1A below. In addition, past financial or operating performance is not necessarily a reliable indicator of future performance, and you should not use our historical performance to anticipate results or future period trends. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition. Except as required by law, we undertake no obligation to update publicly or revise our forward-looking statements.

Overview

We are a biotechnology company developing oral biotherapeutics. Our drug-device combinations could enable new treatment approaches in two main areas:

- Targeted delivery of therapeutics ("Targeted Therapeutics") to the site of disease in the gastrointestinal ("GI") tract, designed to improve outcomes for patients with Inflammatory Bowel Disease; and
- Systemic delivery of biotherapeutics ("Systemic Therapeutics"), designed to replace injections with needle-free, oral delivery technology.

We are also developing diagnostics devices to help characterize the GI tract and diagnose GI diseases, such as Small Intestine Bacterial Overgrowth through the development of innovative technologies that are designed to diagnose at the site of the disease. Using these platforms, we intend to develop therapeutics and diagnostic solutions for a broad range of disorders.

Our historical operations included a licensed Clinical Laboratory Improvement Amendments and College of American Pathologists certified laboratory specializing in the molecular testing markets serving women’s health providers in the obstetric, gynecological, fertility, and maternal fetal medicine specialty areas. Previously, our core business was focused on carrier screening and noninvasive prenatal test market, targeting preconception planning and routine pregnancy management for genetic disease risk assessment. Through our affiliation with Mattison Pathology, LLP (“Mattison”), a Texas limited liability partnership doing business as Avero Diagnostics (“Avero”), our operations also included anatomic and molecular pathology testing products in the United States.

Recent Developments

We recently completed our PM-611 device function study which assessed whether the autonomous location functionality of the ingestible devices designed for targeted drug delivery was impacted by a fed state as compared to a fasted state. The study demonstrated that all analyzed capsules indicated entry to the colon, activation, and deployment, regardless of fasted or fed schedule, with no failure modes observed in the analyzed devices. These study results suggest that the DDS capsule could be the first ingestible therapeutic delivery device that does not require fasting or other food restriction for use, which could be an important consideration for patients who need frequent dosing in chronic diseases like ulcerative colitis.

We also recently announced topline results from our PM-602 device function study which assessed the safety and performance of the DDS device in active UC patients. The study demonstrated that the device was well tolerated, and that the device performed as intended in active UC patients. In all seven patients, the device accurately identified entry into the colon, triggered release of a liquid

payload, and achieved distribution across the entire colon. We are not aware of any other oral drug delivery technology that can accurately detect colon entry, especially in the environment of inflammation, blood and highly variable motility seen in active ulcerative colitis.

During the quarter ended June 30, 2022, we submitted a Type C filing to the FDA asking for feedback on our proposed PGN-600 clinical development plan related to our targeted therapeutics platform. The FDA's recent response was constructive, and FDA generally agreed with the trial design and provided helpful feedback on the protocols. The FDA also reviewed the proposed supporting data package and confirmed the need for animal toxicology data, which is planned for later this year. We expect these activities to allow us to file an IND during the first quarter of 2023 and we plan to begin our Phase 1 study thereafter.

Strategic Transformation and Factors Affecting Our Performance

In June 2021, we announced a strategic transformation ("Strategic Transformation") pursuant to which we are refocusing our efforts on our robust research and development pipeline to better position the business for future growth. The Strategic Transformation includes the closure of our genetics laboratory in Ann Arbor, Michigan, the sale of Avero (together, our "Laboratory Operations"), a reduction in force and other cost-cutting measures and operational improvements.

Prior to the closure of our genetics laboratory in Ann Arbor, Michigan, we generated revenue by providing tests through our Ann Arbor laboratory, including throughout most of the second quarter of 2021. We received payments for such tests from payors, laboratory distribution partners, and self-paying individuals, and more than 95% of payments for our tests we received through reimbursement. We received reimbursement from several distinct channels: commercial third-party payors, laboratory distribution partners, and government health benefits programs such as Medicare and Medicaid. Due to the typical lag in payment following performance of a test, we expect to continue to receive reimbursement payments for a period of time following the closure of the laboratory.

In the second quarter of 2020, we added COVID-19 testing to our offering and began offering COVID-19 testing nationally in mid-November 2020. We are no longer performing COVID-19 testing following the shutdown of our Laboratory Operations.

We are engaged in research and development activities with respect to tests under development and precision medicine product candidates. Following the Strategic Transformation, we are devoting substantially all of our resources to conducting research and development activities (including undertaking preclinical and clinical studies of our precision medicine product candidates), conducting clinical trials of our most advanced precision medicine product candidates, innovating and protecting our inventions and building our patent portfolios, organizing and staffing our company, business planning and raising capital. We do not have any precision medicine products approved for sale, and we have not generated any revenue from precision medicine product sales.

Our business involves significant investment in research and development activities for the development of new products. We intend to continue investing in our pipeline of new products and technologies. We expect our investment in research and development to increase as we pursue regulatory approval of our Targeted Therapeutics and Systemic Therapeutics product candidates and expand our pipeline of diagnostic device product candidates. The achievement of key development milestones is a key factor in evaluating our performance.

We expect to continue to incur significant expenses and increasing operating losses in the near term. While we materially reduced our spend profile as a result of the Strategic Transformation in 2021, we expect our expenses may increase in connection with our ongoing activities as we:

- continue to advance the preclinical and clinical development of our lead Targeted Therapeutics and Systemic Therapeutics product candidates;
- initiate preclinical studies and clinical trials for additional Targeted Therapeutics and Systemic Therapeutics product candidates that we may identify in the future;
- increase personnel and infrastructure to support our clinical development, research and manufacturing efforts;
- build out and expand our in-house process development and engineering and manufacturing capabilities for R&D and clinical purposes;
- continue to build and develop our intellectual property portfolios; and
- incur additional legal, accounting or other expenses in operating our business, including the additional costs associated with operating as a public company.

We do not expect to generate significant product revenue unless and until we successfully complete development and obtain regulatory and marketing approval of, and begin to sell, one or more of our Targeted Therapeutics and Systemic Therapeutics product candidates, which we expect will take several years. We expect to spend a significant amount in development costs prior to such time. We may never succeed in achieving regulatory and marketing approval for our precision medicine product candidates. We may obtain unexpected results from our preclinical and clinical trials. We may elect to discontinue, delay or modify preclinical and clinical trials of our precision medicine product candidates. A change in the outcome of any of these variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. Accordingly, until such time as we can generate significant product revenue, if ever, we expect to continue to seek private or public equity and debt financing to meet our capital requirements. There can be no assurance that such funding may be available to us on acceptable terms, or at all, or that we will be able to commercialize our precision medicine product candidates. In addition, we may not be profitable even if we commercialize any of our precision medicine product candidates.

Key Components of Our Results of Operations

We are providing the following summary of our revenues, research and development expenses and general and administrative expenses to supplement the more detailed discussion below. This summary excludes our revenues, research and development expenses, selling and marketing, general and administrative and other expenses associated with our Laboratory Operations, which are reported within loss from discontinued operations.

Revenue

Historically, all of our revenue has been derived from molecular laboratory tests, principally from the sale of non-invasive prenatal tests ("NIPT"), genetic carrier screening, and pathology molecular testing. If our development efforts for our Targeted Therapeutics and Systemic Therapeutics product candidates under development are successful and eventually result in regulatory approval, we may generate revenue from future product sales. If we enter into license or collaboration agreements for any of our product candidates or intellectual property, we may generate revenue in the future from payments as a result of such license or collaboration agreements. We cannot predict if, when, or to what extent we will generate revenue from the commercialization and sale of our precision medicine product candidates or from license or collaboration agreements. We may never succeed in obtaining regulatory approval for any of our Targeted Therapeutics and Systemic Therapeutics product candidates.

Research and Development

Research and development expenses consist primarily of costs associated with developing new products, including our precision medicine product candidates. Research and development expenses also consist of personnel expenses, including salaries, bonuses, stock-based compensation expense, benefits, consulting costs, and allocated overhead costs. Research and development costs are expensed as incurred.

We plan to continue investing in research and development activities for the foreseeable future as we focus on our Targeted Therapeutics and Systemic Therapeutics programs through preclinical studies and clinical trials. We also expect our investment in research and development to increase as we pursue regulatory approval of our product candidates and as we seek to expand our pipeline of product candidates.

Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. While we plan to partner with large pharmaceutical companies, especially for the later stage clinical work, we still expect our research and development expenses to increase over the next several years as we conduct additional preclinical studies and clinical trials, including later-stage clinical trials, for our current and future product candidates and pursue regulatory approval of our product candidates. The process of conducting the necessary preclinical and clinical research to obtain regulatory approval is costly and time consuming. The actual probability of success for our product candidates may be affected by a variety of factors including:

- the safety and efficacy of our product candidates;
- early clinical data for our product candidates;
- investment in our clinical programs;
- the ability of collaborators to successfully develop our licensed product candidates;
- competition;
- manufacturing capability; and

- commercial viability.

We may never succeed in achieving regulatory approval for any of our product candidates due to the uncertainties discussed above. We are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will generate revenue from the commercialization and sale of our product candidates, if ever.

Due to the impact of the COVID-19 pandemic, certain of our research and development activities have been delayed and may be further delayed. For more information on risks related to COVID-19, see "Risk Factors—The ongoing COVID-19 pandemic could further materially affect our operations, as well as the business or operations of third parties with whom we conduct business. Our business could be adversely affected by the effects of other future health epidemics or pandemics in regions where we or third parties on which we rely have significant business operations."

Selling, General and Administrative

Selling, general and administrative expenses consist primarily of personnel costs, including salaries, bonuses, stock-based compensation expense, and benefits, for our finance and accounting, legal, human resources, and other administrative teams. Additionally, these expenses include costs for communication, advertising, conferences, and professional fees of audit, legal, and recruiting services. Additionally, expenses related to maintaining compliance with the stipulations of the government settlement and the legal costs associated with the legal matters described in Part II, Item 1. "Legal Proceedings" in this Quarterly Report are included.

Interest Expense, Net

Interest expense, net is primarily attributable to borrowings under our Credit Agreement (as defined below), our mortgages payable, lease agreements and interest income earned from our cash and cash equivalents.

Gain (Loss) on Warrant Liability

Gain (loss) on warrant liability consists of changes in the fair value of our liability-classified warrants to purchase common stock.

Other Income, Net

Other income, net primarily consists of changes in the fair value of our embedded derivative liability related to the Convertible Notes, and inducement loss on our Convertible Notes.

Income Tax Provision

We account for income taxes under the asset-and-liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis, and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

We recognize the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is more than 50% likely of being realized. Changes in recognition or measurement are recognized in the period in which the change in judgment occurs. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized. Due to losses generated in the past and projected future taxable losses anticipated in the future, we established a 100% valuation allowance on net deferred tax assets.

Results of Operations.

Comparison of Three Months Ended June 30, 2022 and 2021

	Three Months Ended June 30,	
	2022	2021
	(in thousands) (unaudited)	
Statement of Operations Data:		
Revenues	\$ 104	\$ 463
Operating expenses:		
Research and development	5,904	13,401
Selling, general and administrative	8,410	22,715
Total operating expenses	14,314	36,116
Loss from operations	(14,210)	(35,653)
Interest expense, net	(2,772)	(3,502)
Gain (loss) on warrant liability	4,413	(5,146)
Other income, net	5,735	2,901
Loss before income taxes	(6,834)	(41,400)
Income tax benefit	(837)	—
Loss from continuing operations	(5,997)	(41,400)
Gain (loss) from discontinued operations	484	(37,131)
Net loss	\$ (5,513)	\$ (78,531)

Revenue

As a result of the classification of Laboratory Operations to discontinued operations, all revenue from Laboratory Operations has been classified as discontinued operations. The remaining revenue is related to license and collaboration agreements.

Research and Development Expenses

	Three Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Research and development	\$ 5,904	\$ 13,401	\$ (7,497)	(55.9)%

The decrease in research and development expenses was primarily attributable to a decrease in salary and benefits, consulting and professional fees and the cost of supplies.

Selling, General and Administrative Expenses

	Three Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Selling, general and administrative	\$ 8,410	\$ 22,715	\$ (14,305)	(63.0)%

The decrease in selling, general and administrative expenses was primarily attributable to a decrease in salary and benefits, consulting and professional fees, selling and marketing, facilities and software costs.

Interest Expense, Net

	Three Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Interest expense, net	\$ 2,772	\$ 3,502	\$ (730)	(20.8)%

The decrease in interest expense, net was due to a decrease in the balance of Convertible Notes due to conversions during 2021.

Gain (Loss) on Warrant Liability

	Three Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Gain (loss) on warrant liability	\$ 4,413	\$ (5,146)	\$ 9,559	*

* The change is more than 100%

The change in gain (loss) on warrant liability was due to the change in fair value of the warrant liability for warrants issued during 2021.

Other Income, Net

	Three Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Other income, net	\$ 5,735	\$ 2,901	\$ 2,834	97.7%

The change in other income, net, was primarily due to a gain of \$5.7 million on investment in Enumera, offset by a decrease in the fair value of our embedded derivative liability related to the Convertible Notes for the three months ended June 30, 2021 that did not reoccur in 2022.

Income Tax Benefit

	Three Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Income tax benefit	\$ 837	\$ —	\$ 837	100.0%

The increase in income tax benefit was primarily due to federal and state income tax refunds.

Discontinued Operations

	Three Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Gain (loss) from discontinued operations	\$ 484	\$ (37,131)	\$ 37,615	*

* The change is more than 100%

The change in gain (loss) from discontinued operations was due to the closure of our Laboratory Operations during 2021. See Note 4 to our condensed consolidated financial statements included elsewhere in this Quarterly Report for additional information regarding discontinued operations.

Comparison of Six Months Ended June 30, 2022 and 2021

	Six Months Ended June 30,	
	2022	2021
	(in thousands) (unaudited)	
Statement of Operations Data:		
Revenues	\$ 211	\$ 630
Operating expenses:		
Research and development	12,462	25,074
Selling, general and administrative	21,867	42,673
Total operating expenses	34,329	67,747
Loss from operations	(34,118)	(67,117)
Interest expense, net	(5,532)	(7,022)
Gain (loss) on warrant liability	13,402	(2,496)
Other income, net	4,924	17,774
Loss before income taxes	(21,324)	(58,861)
Income tax benefit	(837)	—
Loss from continuing operations	(20,487)	(58,861)
Gain (loss) from discontinued operations	1,166	(51,934)
Net loss	\$ (19,321)	\$ (110,795)

Revenue

As a result of the classification of Laboratory Operations to discontinued operations, all revenue from Laboratory Operations has been classified as discontinued operations. The remaining revenue is related to license and collaboration agreements.

Research and Development Expenses

	Six Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Research and development	\$ 12,462	\$ 25,074	\$ (12,612)	(50.3)%

The decrease in research and development expenses was primarily attributable to a decrease in salary and benefits, consulting and professional fees and the cost of supplies.

Selling, General and Administrative Expenses

	Six Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Selling, general and administrative	\$ 21,867	\$ 42,673	\$ (20,806)	(48.8)%

The decrease in selling, general and administrative expenses was primarily attributable to a decrease in salary and benefits, consulting and professional fees, selling and marketing, and software costs.

Interest Expense, Net

	Six Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Interest expense, net	\$ 5,532	\$ 7,022	\$ (1,490)	(21.2)%

The decrease in interest expense, net was due to a decrease in the balance of Convertible Notes due to conversions during 2021.

Gain (Loss) on Warrant Liability

	Six Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Gain (loss) on warrant liability	\$ 13,402	\$ (2,496)	\$ 15,898	*

* The change is more than 100%

The change in gain (loss) on warrant liability was due to the change in fair value of the warrant liability for warrants issued during 2021.

Other Income, Net

	Six Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Other income, net	\$ 4,924	\$ 17,774	\$ (12,850)	(72.3)%

The change in other income, net was primarily due to a gain of \$5.7 million on investment in Enumera, offset by a decrease in the fair value of our embedded derivative liability related to the Convertible Notes for the six months ended June 30, 2021 that did not reoccur in 2022.

Income Tax Benefit

	Six Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Income tax benefit	\$ 837	\$ —	\$ 837	100.0%

The increase in income tax benefit was primarily due to federal and state income tax refunds.

Discontinued Operations

	Six Months Ended June 30,		Increase/ (Decrease)	% Change
	2022	2021		
	(in thousands) (unaudited)			
Gain (loss) from discontinued operations	\$ 1,166	\$ (51,934)	\$ 53,100	*

* The change is more than 100%

The change in gain (loss) from discontinued operations was due to the closure of our Laboratory Operations during 2021. See Note 4 to our condensed consolidated financial statements included elsewhere in this Quarterly Report for additional information regarding discontinued operations.

Liquidity and Capital Resources.

Since our inception, our primary sources of liquidity have been generated by our operations, sales of common stock, preferred stock, warrants to purchase common stock and preferred stock, and cash from debt financings, including Convertible Notes.

As of June 30, 2022, we had \$48.5 million of cash and cash equivalents and \$127.1 million of outstanding Convertible Notes. Our accumulated deficit as of June 30, 2022, was \$808.0 million. For the six months ended June 30, 2022, we had a net loss of \$19.3 million and cash used in operations of \$43.6 million. Our primary requirements for liquidity have been to fund our working capital needs, capital expenditures, dividends, research and development, and general corporate needs.

While we have greatly reduced our cash burn following the Strategic Transformation, we do not expect that our current cash and cash equivalents will be sufficient to fund our operations for at least 12 months from the issuance date of the condensed consolidated financial statements for the three and six months ended June 30, 2022, and will require additional capital to fund our operations. As a result, there is substantial doubt about our ability to continue as a going concern for 12 months following the issuance date of the condensed consolidated financial statements for the three and six months ended June 30, 2022. We therefore intend to raise additional capital through equity offerings and/or debt financings or from other potential sources of liquidity, which may include new collaborations, licensing or other commercial agreements for one or more of our research programs or patent portfolios. Adequate funding, if needed, 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 would be forced to delay, reduce or eliminate our research and development programs or other operations. If any of these events occur, our ability to achieve our operational goals would be adversely affected. Our future capital requirements and the adequacy of available funds will depend on many factors, including those described in "Risk Factors." Depending on the severity and direct impact of these factors on us, we may be unable to secure additional financing to meet our operating requirements on terms favorable to us, or at all. Our ability to raise additional funds 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.

Convertible Notes

In December 2020, in connection with a private offering of the convertible notes pursuant to Rule 144A under the Securities Act, we issued a total of \$168.5 million principal amount of our convertible notes ("Convertible Notes"). The Convertible Notes were issued pursuant to, and are governed by, an indenture, dated as of December 7, 2020, by and between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee ("Indenture"). The Convertible Notes are due on December 1, 2025, unless earlier repurchased, redeemed or converted, and accrue interest at a rate per annum equal to 7.25% payable semi-annually in arrears on June 1 and December 1 of each year, with the initial payment on June 1, 2021. The Company recognized interest expense on the Convertible Notes of \$2.4 million and \$4.8 million during the three and six months ended June 30, 2022, respectively, and \$3.1 million and \$6.2 million during the three and six months ended June 30, 2021, respectively.

The Convertible Notes are our senior, unsecured obligations and are (i) equal in right of payment with our existing and future senior, unsecured indebtedness; (ii) senior in right of payment to our existing and future indebtedness that is expressly subordinated to the Notes; (iii) effectively subordinated to our existing and future secured indebtedness, to the extent of the value of the collateral securing that indebtedness; and (iv) structurally subordinated to all existing and future indebtedness and other liabilities, including trade payables, and (to the extent we are not a holder thereof) preferred equity, if any, of our subsidiaries.

At any time, noteholders may convert their Convertible Notes at their option into shares of our common stock, together, if applicable, with cash in lieu of any fractional share, at the then-applicable conversion rate. The initial conversion rate is 278.0094 shares of common stock per \$1,000 principal amount of Convertible Notes, which represents an initial conversion price of approximately \$3.60 per share of common stock. Noteholders that convert their Notes before December 1, 2022 will, in certain circumstances, be entitled to an additional cash payment representing the present value of any remaining interest payments on the Convertible Notes through December 1, 2022. The conversion rate and conversion price are subject to customary adjustments upon the occurrence of certain events. In addition, if certain corporate events that constitute a Make-Whole Fundamental Change (as defined in the Indenture) occur, then the conversion rate will, in certain circumstances, be increased for a specified period of time.

The Convertible Notes are redeemable, in whole and not in part, at our option at any time on or after December 1, 2023, at a cash redemption price equal to the principal amount of the Convertible Notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date, but only if the last reported sale price per share of the our common stock exceeds 130% of the

conversion price on (i) each of at least 20 trading days, whether or not consecutive, during the 30 consecutive trading days ending on, and including, the trading day immediately before the date we send the related redemption notice; and (ii) the trading day immediately before the date we send such notice. In addition, calling the Convertible Notes will constitute a Make-Whole Fundamental Change, which will result in an increase to the conversion rate in certain circumstances for a specified period of time.

The Convertible Notes have customary provision relating to the occurrence of Events of Default (as defined in the Indenture), which include the following: (i) certain payment defaults on the Convertible Notes (which, in the case of a default in the payment of interest on the Convertible Notes, will be subject to a 30-day cure period); (ii) our failure to send certain notices under the Indenture within specified periods of time; (iii) our failure to comply with certain covenants in the Indenture relating to the Company's ability to consolidate with or merge with or into, or sell, lease or otherwise transfer, in one transaction or a series of transactions, all or substantially all of our assets and assets of our subsidiaries, taken as a whole, to another person; (iv) a default by us in our other obligations or agreements under the Indenture or the Convertible Notes if such default is not cured or waived within 60 days after notice is given in accordance with the Indenture; (v) certain defaults by us or any of our subsidiaries with respect to indebtedness for borrowed money of at least \$7,500,000; (vi) the rendering of certain judgments against us or any of our subsidiaries for the payment of at least \$7,500,000, where such judgments are not discharged or stayed within 60 days after the date on which the right to appeal has expired or on which all rights to appeal have been extinguished; and (vii) certain events of bankruptcy, insolvency and reorganization involving us or any of our significant subsidiaries. As of June 30, 2022, we were in compliance with all such covenants.

In October 2021, we entered into privately negotiated agreements with certain holders of Convertible Notes to exchange an aggregate of \$20.2 million principal amount for 8,513,850 shares of our common stock. In addition, we issued an aggregate of 427,804 shares of common stock to certain investors in consideration for a waiver of certain contractual lock-up provisions to which we agreed to in connection with prior offerings of its securities.

In addition to the transaction discussed above, holders of Convertible Notes exchanged an aggregate of \$15.6 million principal amount for 4,336,938 shares of our common stock during the year ended December 31, 2021.

PIPE Financings

In February 2021, we entered into a Securities Purchase Agreement for a private placement with certain institutional and accredited investors, pursuant to which the purchasers purchased an aggregate of 4,370,629 units representing (i) 4,370,629 shares of the Company's common stock, par value \$0.001 per share, and (ii) warrants to purchase up to 4,370,629 shares of common stock. The purchase price for each unit was \$5.72, for an aggregate purchase price of approximately \$25.0 million. The transaction closed on February 25, 2021. The warrants are exercisable for cash at an exercise price of \$6.86 per share, subject to adjustments as provided under the terms of the warrants. The warrants are immediately exercisable for cash and expire on the fifth anniversary of the date of issuance. If exercised for cash, the warrants would result in additional gross proceeds to us of approximately \$30.0 million.

In June 2021, we entered into a Securities Purchase Agreement for a private placement with certain institutional and accredited investors, pursuant to which the purchasers have agreed to purchase an aggregate of 16,194,332 units representing (i) 16,194,332 shares of the Company's common stock, par value \$0.001 per share (or pre-funded warrants in lieu thereof), and (ii) warrants to purchase up to 16,194,332 shares of common stock. The purchase price for each unit was \$2.47, for an aggregate purchase price of approximately \$40.0 million. The transaction closed on June 14, 2021. The warrants are immediately exercisable at an exercise price of \$2.84 per share, subject to adjustments as provided under the terms of the warrants, and expire on the fifth anniversary of the date of issuance. The pre-funded warrants are exercisable at an exercise price of \$0.001 per share and have no expiration date. If exercised for cash, the warrants would result in additional gross proceeds to us of approximately \$46 million.

Registered Offerings

In August 2021, we issued and sold an aggregate of (i) 40,000,000 shares of common stock and (ii) warrants to purchase 40,000,000 shares of common stock in an underwritten public offering. Each share was sold together with one warrant to purchase one share of common stock at a combined public offering price of \$1.00 per share of the common stock and the accompanying warrant. We received approximately \$37.4 million in net proceeds, after deducting underwriting discounts and commissions and other offering expenses payable by the Company. The warrants have an exercise price of \$1.00 per share, are exercisable at any time, and will expire five years following the date of issuance. The agreement also allowed for the purchase of up to an additional 6,000,000 shares at the option of the underwriters, which was partially exercised for warrants to purchase an aggregate of 1,932,000 shares of common stock.

In October 2021, we entered into a securities purchase agreement with certain institutional and accredited investors relating to the offering and sale of 13,333,334 shares of common stock at a purchase price of \$1.50 per share in a registered direct offering. We received approximately \$18.7 million in net proceeds, after deducting placement agent fees and other offering expenses payable by the Company.

At-The-Market Sales Agreement and Offering

In November 2021, we entered into an At Market Issuance Sales Agreement ("Sale Agreement") with B. Riley Securities, Inc., BTIG, LLC, and H.C. Wainwright & Co. LLC ("Agents"), pursuant to which we may offer and sell shares of common stock having an aggregate offering price of up to \$90,000,000, from time to time, in "at the market" offerings through the Agents. Sales of the shares of common stock, if any, will be made at prevailing market prices at the time of sale, or as otherwise agreed with the Agents. The Agents will receive a commission from the Company of up to 3.0% of the gross proceeds of any shares of common stock sold under the Sale Agreement. During the three months ended June 30, 2022, the Company received net proceeds of \$1.1 million, after deducting commissions and other offering expenses, from the sale of 1,599,652 shares under the ATM Sale Agreement. The Company sold such shares at a weighted average purchase price of \$0.70 per share.

Cash Flows

Our primary uses of cash are to fund our operations and research and development as we continue to grow our business. We expect to continue to incur operating losses in future periods as our operating expenses increase to support the growth of our business. We expect that our research and development expenses will continue to increase as we focus on developing innovative products, including our precision medicine product candidates, through preclinical studies and clinical trials. We also expect our investment in research and development to increase as we pursue regulatory approval of our product candidates and as we seek to expand our pipeline of product candidates. We expect selling and marketing and general and administrative expenses to decrease as a result of the closure of our Laboratory Operations and the sale of Avero. Cash used to fund operating expenses is impacted by the timing of when we pay expenses, as reflected in the change in our outstanding accounts payable and accrued expenses.

The following table summarizes our cash flows for the periods indicated (in thousands):

	Six Months Ended June 30,	
	2022	2021
Cash used in operating activities	\$ (43,594)	\$ (84,250)
Cash used in investing activities	(556)	(1,021)
Cash provided by financing activities	4,259	59,742

Operating Activities

Net cash used in operating activities in the six months ended June 30, 2022 was primarily attributable to a \$19.3 million net loss, adjusted for a \$1.2 million gain from discontinued operations and non-cash charges, primarily driven by a \$13.4 million change in fair value related to the warrant liability and \$5.7 million gain on investment in Enumera, partially offset by \$3.5 million of stock-based compensation expense, \$0.7 million of debt discount amortization, \$0.5 million of depreciation and amortization and \$0.5 million of fixed asset impairment. The net cash outflow from changes in operating assets and liabilities was attributable to a \$4.5 million decrease in accrued expenses and other current liabilities, a \$4.4 million decrease in accounts payable, a \$1.0 million decrease in other long-term liabilities and a \$0.9 million decrease in prepaid expenses and other current assets. Additionally, net cash provided by operating activities from discontinued operations contributed \$1.8 million of inflows.

Net cash used in operating activities in the six months ended June 30, 2021 was primarily attributable to a \$110.8 million net loss, adjusted for a \$51.9 million loss from discontinued operations and \$3.7 million of non-cash charges, primarily driven by an \$18.0 million change in fair value related to the Convertible Notes, \$2.5 million of change in fair value of warrant liability, \$5.6 million of stock-based compensation expense, and \$1.0 million of depreciation and amortization expense. The net cash outflow from changes in operating assets and liabilities was attributable to a \$4.9 million increase in prepaid expenses and other and a \$7.0 million increase in accrued expenses and other liabilities, offset by a \$6.6 million decrease in other long-term liabilities and a \$1.7 million decrease in accounts payable. Additionally, net cash used in operating activities from discontinued operations contributed \$32.1 million of outflows.

Investing Activities

Net cash used in investing activities during the six months ended June 30, 2022 was attributable to \$0.6 million in purchases of property and equipment. Net cash used in investing for the six months ended June 30, 2021 was primarily attributable to \$0.9 million in purchases of property and equipment and \$0.2 million from discontinued operations.

Financing Activities

Net cash provided by financing activities during the six months ended June 30, 2022 was primarily attributable to \$4.8 million in net proceeds from the issuance of common stock, partially offset by \$0.6 million in payments for insurance financing. Net cash provided by financing activities during the six months ended June 30, 2021 was primarily attributable to \$23.4 million in net proceeds from the issuance of common stock, and \$39.4 million in net proceeds from the issuance of common stock warrants, partially offset by

\$2.7 million in payments for insurance financing, and \$0.2 million in principal payments on mortgages payable and capital lease obligations.

Other Contractual Obligations and Commitments

See Note 10 to our condensed consolidated financial statements included elsewhere in this Quarterly Report for additional information. There have been no other material changes from the contractual obligations and commitments disclosed in our Annual Report.

Critical Accounting Policies and Significant Judgments and Estimates.

Our management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in conformity with GAAP. The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions about future events that affect the amounts of assets and liabilities reported, disclosures about contingent assets and liabilities, and reported amounts of revenue and expenses. These estimates and assumptions are based on management's best estimates and judgment. Management regularly evaluates its estimates and assumptions using historical experience and other factors; however, actual results could differ materially from these estimates and could have an adverse effect on our financial statements.

During the six months ended June 30, 2022, there were no significant changes to the information discussed under "Critical Accounting Policies and Significant Judgments and Estimates" included in the Management's Discussion and Analysis of Financial Condition and Results of Operations section of our Form 10-K for the year ended December 31, 2021.

Recent Accounting Pronouncements.

Refer to Note 2, "Summary of Significant Accounting Policies" to the condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for information on recently issued accounting pronouncements.

JOBS Act Accounting Election.

We are an emerging growth company, as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have elected to use this extended transition period and, as a result, our financial statements may not be comparable to companies that comply with public company effective dates. We also intend to rely on other exemptions provided by the JOBS Act, including without limitation, not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act of 2002, as amended.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are a smaller reporting company, as defined by Rule 12b-2 under the Exchange Act and in Item 10(f)(1) of Regulation S-K, and are not required to provide the information under this item.

Item 4. Controls and Procedures.

Our management, with the participation and supervision of our Chief Executive Officer and our Chief Financial Officer, have evaluated our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Quarterly Report. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that, as of the end of the period covered by this Quarterly Report, our disclosure controls and procedures are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

Refer to Note 10, "Commitments and Contingencies" to the condensed consolidated financial statements included in this Quarterly Report on Form 10-Q, and our historical Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q for prior periods, for information on our historical and ongoing legal proceedings.

Colorado Recoupment

On July 21, 2021, we received a letter from the Colorado Department of Health Care Policy and Financing (the "Department"), informing us that, as a result of a post-payment review of Medicaid claims from October 2014 to June 2018, the Department is seeking recoupment for historical payments in an aggregate amount of approximately \$5.7 million. In December 2021, we received additional correspondence informing us that the Department is seeking recoupment for an additional \$3.3 million of historical payments from 2018.

The historical payments for which the Department is seeking recoupment primarily relate to our Preparent expanded carrier screening tests primarily on the basis that such tests were not medically necessary.

We previously entered into settlement agreements with 45 states, including the State of Colorado as part of a settlement with respect to certain civil claims related to our discontinued legacy billing practices for our non-invasive prenatal tests and microdeletion tests and the provision of alleged kickbacks or inducements to physicians and patients.

We disputed these claims of recoupment with the Department, filed administrative complaints with the State of Colorado Office of Administrative Courts, and are also seeking to offset such claims by an amount of approximately \$1.9 million previously paid to the Department in connection with the state settlement agreements referred to above. At this preliminary stage, we are unable to predict the ultimate outcome of this action, and therefore cannot estimate the reasonably possible loss or range of loss, if any, that may result from this action.

California Subpoena

On July 19, 2021, we received a subpoena from the California Attorney General's Office, Division of Public Rights, requesting documents and information related to our former genetic testing practices, including NIPT, particularly those with a nexus to California patients. The subpoena is captioned "In the Matter of the Investigation of: Prenatal Genetic Testing Companies." We continue to cooperate and provide information requested by the subpoena. Based upon discussions with the California Attorney General's Office, we believe the focus of the investigation is potential consumer protection claims related to billing of patient co-pays. The investigation thus remains ongoing, and it is not possible to predict an outcome at this time.

OIG Inquiry

On October 16, 2019, we received an inquiry from the Texas Health & Human Services Commission Office of Inspector General (the "TX OIG"), alleging that we did not hold the required CLIA Laboratory Certificate of Accreditation to perform, bill for, or be reimbursed by the Texas Medicaid Program for certain tests performed by us from January 1, 2015 through December 31, 2018. We submitted a written response to the inquiry on October 23, 2019. In October 2021, we received a letter from the TX OIG asking us to renew our engagement on the matter. We continue to cooperate with the TX OIG toward resolution of the matter. Although we believe that we hold and have held all required CLIA certificates and/or subcontract with third-party laboratories that hold and have held such certificates to perform all of the tests subject to the TX OIG inquiry, there can be no assurance that the TX OIG will agree with this position. The Company has an accrual for the estimated probable loss for this matter as of June 30, 2022.

Ravgen Lawsuit

On December 22, 2020, Ravgen, Inc. ("Ravgen"), filed suit in the District of Delaware (D. Del. Civil Action No. 1:20-cv-1734) asserting our infringement of two Ravgen patents based on our former NIPT testing business. The complaint seeks monetary damages and injunctive relief. We responded to the complaint on March 23, 2021.

We believe the claims in Ravgen's complaint are without merit, and we are vigorously defending against them. On March 1, 2022, the court ordered a stay of the litigation pending resolution of patent validity challenges made against the two patents in inter partes review proceedings currently pending before the Patent Trial and Appeal Board of the United States Patent and Trademark Office.

IPO Litigation

On June 23, 2020, we closed our initial public offering of our common stock (the "IPO"). Lawsuits were filed on August 28, 2020 and September 11, 2020 against the Company, certain of its executive officers and directors, and the underwriters of the IPO. On

December 3, 2020, the U.S. District Court for the Southern District of California consolidated the two actions, appointed Lin Shen, Lingjun Lin and Fusheng Lin to serve as Lead Plaintiffs, and approved Glancy Prongay & Murray LLP to be Lead Plaintiffs' Counsel. Lead Plaintiffs filed their first amended complaint on February 4, 2021. Together with the underwriters of the IPO, we moved to dismiss the first amended complaint. On September 1, 2021, the court granted our motion to dismiss, dismissing Lead Plaintiffs' claims without prejudice. On September 22, 2021, Lead Plaintiffs filed their second amended complaint. It alleges that our registration statement and related prospectus for the IPO contained false and misleading statements and omissions in violation of the Securities Act of 1933, as amended (the "Securities Act") by failing to disclose that (i) we had overbilled government payors for Preparent tests beginning in 2019 and ending in or before early 2020; (ii) there was a high probability that we had received, and would have to refund, a material amount of overpayments from government payors for Preparent tests; (iii) in February 2020 we ended a supposedly improper marketing practice on which the competitiveness of our business depended; and (iv) we were suffering from material negative trends with respect to testing volumes, average selling prices for our tests, and revenues. Lead Plaintiffs seek certification as a class, unspecified compensatory damages, interest, costs and expenses including attorneys' fees, and unspecified extraordinary, equitable, and/or injunctive relief. Together with the underwriters of the IPO, we moved to dismiss the second amended complaint on November 15, 2021, Lead Plaintiffs filed an opposition to the motion on January 14, 2022, and we filed our reply in support of the motion on February 22, 2022. We intend to continue to vigorously defend against these claims. Subject to a reservation of rights, we are advancing expenses subject to indemnification to the underwriters of the IPO.

On June 4, 2021, a purported shareholder filed a lawsuit in the U.S. District Court for the Southern District of California, claiming to sue derivatively on behalf of the Company. The complaint names certain of the Company's officers and directors as defendants, and names the Company as a nominal defendant. Premised largely on the same allegations as the above-described securities lawsuit, it alleges that the individual defendants breached their fiduciary duties to the Company, wasted corporate assets, and caused the Company to issue a misleading proxy statement in violation of the Exchange Act. The complaint seeks the award of unspecified damages to the Company, equitable and injunctive remedies, and an order directing the Company to reform and improve its internal controls and board oversight. It also seeks the costs and disbursements associated with bringing suit, including attorneys', consultants', and experts' fees. The case is stayed pending the outcome of the motion to dismiss in the above-described securities lawsuit. We intend to vigorously defend against these claims.

On August 17, 2021, we received a letter purportedly on behalf of a stockholder of the Company demanding that our Board of Directors investigate and take action against certain of the Company's current and former officers and directors to recover damages for alleged breaches of fiduciary duties and related claims arising out of the IPO litigation discussed above. Our Board of Directors intends to evaluate the demand and any additional steps to be taken after the resolution of the IPO litigation discussed above.

Given the uncertainty of litigation, the preliminary stages of the litigation and other legal matters set forth above, and the legal standards that must be met for, among other things, success on the merits, we are unable to predict the ultimate outcome of these actions, and therefore cannot estimate the reasonably possible loss or range of loss, if any, that may result from these actions.

Item 1A. Risk Factors.

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this Quarterly Report on Form 10-Q, including "Management's Discussion & Analysis" and the financial statements and related notes, before deciding to make an investment decision with respect to shares of our common stock. If any of the following risks actually occurs, our business, financial condition, operating results, reputation, and prospects could be materially and adversely affected. In that event, the price of our common stock could decline and you could lose part or all of your investment. We caution you that the risks, uncertainties and other factors referred to below and elsewhere in this Quarterly Report on Form 10-Q may not contain all of the risks, uncertainties and other factors that may affect our future results and operations. Moreover, new risks will emerge from time to time. It is not possible for our management to predict all risks. In this "Risk Factors" section, unless the context requires otherwise, references to "we," "us," "our," "Biora," "Biora Therapeutics" or the "company" refer to Biora Therapeutics, Inc. and its subsidiaries.

Risk Factor Summary

- We have incurred losses in the past, and we may not be able to achieve or sustain profitability in the future.
- Operating our business will require a significant amount of cash, and our ability to generate sufficient cash depends on many factors, some of which are beyond our control. We expect to need to raise additional capital, and if we cannot raise additional capital when needed, we may have to curtail or cease operations.
- We rely on a limited number of suppliers or, in some cases, single suppliers, and may not be able to find replacements or immediately transition to alternative suppliers on a cost-effective basis, or at all.
- The manufacturing of our precision medicine product candidates, and other products under development, is highly exacting and complex, and we depend on third parties to supply materials and manufacture certain products and components.
- The ongoing COVID-19 pandemic could further materially affect our operations, as well as the business or operations of third parties with whom we conduct business. Our business could be adversely affected by the effects of other future health epidemics or pandemics in regions where we or third parties on which we rely have significant business operations.
- Beginning in the fourth quarter of 2020, we began to reallocate resources within our organization to align more closely with our business priorities. This included reducing the resources allocated to certain programs and refocusing our resources on other key areas of our business, such as our therapeutics pipeline. In addition, in June 2021, we announced a Strategic Transformation that involves certain cost realignment measures and in December 2021 we announced the sale of Avero. While we have made significant progress on these activities, we may experience difficulties in managing these changes to our organization and if unsuccessful, our financial condition and operating results may be adversely affected.
- We operate in a highly competitive business environment.
- Our success depends on our ability to develop new product candidates, which is complex and costly and the results are uncertain.
- We are still developing our precision medicine platform and are in the early stages of its development, have conducted some early preclinical studies, and limited early clinical studies, and to date have generated no precision medicine products or product revenue. There can be no assurance that we will develop any precision medicine products that deliver diagnostic or therapeutic solutions, or, if developed, that such product candidates will be authorized for marketing by regulatory authorities, or will be commercially successful. This uncertainty makes it difficult to assess our future prospects and financial results.
- Our outstanding debt, and any new debt, may impair our financial and operating flexibility.
- We may not be able to obtain and maintain the third-party relationships that are necessary to develop, commercialize, and manufacture some or all of our product candidates.
- If third-party payors do not adequately reimburse for our products under development, they might not be purchased or used, which may adversely affect our revenue and profitability.
- If we or our commercial partners act in a manner that violates healthcare laws or otherwise engage in misconduct, we could face substantial penalties and damage to our reputation, and our business operations and financial condition could be adversely affected.

- Third-party claims of intellectual property infringement could result in litigation or other proceedings, which would be costly and time-consuming, and could limit our ability to commercialize our products.

Risks Related to Our Business and Industry

We have incurred losses in the past, and we may not be able to achieve or sustain profitability in the future.

We expect to incur significant costs in connection with the development, approval, and commercialization of our products under development. Even if we succeed in creating such product candidates from these investments, those innovations still may fail to result in commercially successful products.

Other than potential revenues from partnerships similar to those we have entered into in the recent past, we do not expect to generate significant revenues in the immediate future. We do not expect to generate sufficient revenue to cover our costs for the foreseeable future, including research and development expenses related to furthering our product pipeline. We may not generate significant revenue in the future until we are able to achieve commercialization of our product candidates or enter into licensing or collaboration agreements with respect to such product candidates.

Since we or any collaborators or licensees may not successfully develop additional product candidates, obtain required regulatory authorizations, manufacture products at an acceptable cost or with appropriate quality, or successfully market and sell such product candidates with desired margins, our expenses may continue to exceed any revenues we may receive. Our operating expenses also will increase as and if, among other things:

- our earlier-stage product candidates move into later-stage clinical development, which is generally more expensive than early-stage development;
- additional technologies or products are selected for development;
- we pursue development of our tests or other product candidates for new uses;
- we increase the number of patents we are prosecuting or otherwise expend additional resources on patent prosecution or defense; or
- we acquire or in-license additional technologies, product candidates, products, or businesses.

Operating our business will require a significant amount of cash, and our ability to generate sufficient cash depends on many factors, some of which are beyond our control. We expect to need to raise additional capital, and if we cannot raise additional capital when needed, we may have to curtail or cease operations.

We expect to incur significant costs in connection with our operations, including but not limited to the research and development, marketing authorization, and/or commercialization of new medical devices, therapeutics, and other products. These development activities generally require a substantial investment before we can determine commercial viability, and the proceeds from our offerings to date will not be sufficient to fully fund these activities. In addition, as a result of the Strategic Transformation, our revenue has been significantly reduced. We will need to raise additional funds through public or private equity or debt financings, collaborations, licensing arrangements or sales of assets to continue to fund or expand our operations. Following the Strategic Transformation, we will no longer generate revenue from our historical testing business, and we would be dependent on such additional sources of capital, including public or private equity or debt financings, collaborations, licensing arrangements or sales of assets for all of our future capital requirements if we do not achieve commercialization of our product candidates.

Our actual liquidity and capital funding requirements will depend on numerous factors, including:

- the scope and duration of and expenditures associated with our discovery efforts and research and development programs, including for our precision medicine platform;
- the costs to fund our commercialization strategies for any product candidates for which we receive marketing authorization or otherwise launch and to prepare for potential product marketing authorizations, as required;
- the costs of any acquisitions of complementary businesses or technologies that we may pursue;
- potential licensing or partnering transactions, if any;
- our facilities expenses, which will vary depending on the time and terms of any facility lease or sublease we may enter into, and other operating expenses;
- the scope and extent of any future expansion of our sales and marketing efforts;
- potential and pending litigation, potential payor recoupments of reimbursement amounts, and other contingencies;

- the commercial success of our future products;
- the termination costs associated with our Strategic Transformation;
- any proceeds from strategic transactions; and
- our ability to collect our accounts receivable.

The availability of additional capital, whether from private capital sources (including banks) or the public capital markets, fluctuates as our financial condition and market conditions in general change. There may be times when the private capital sources and the public capital markets lack sufficient liquidity or when our securities cannot be sold at attractive prices, or at all, in which case we would not be able to access capital from these sources. In addition, a weakening of our financial condition, a further decline in our share price or a deterioration in our credit ratings could adversely affect our ability to obtain necessary funds. Even if available, additional financing could be costly or have adverse consequences.

Additional capital, if needed, may not be available on satisfactory terms or at all. Furthermore, any additional capital raised through the sale of equity or equity-linked securities will dilute our stockholders' ownership interests and may have an adverse effect on the price of our common stock. In addition, the terms of any financing may adversely affect stockholders' holdings or rights. Debt financing, if available, may include restrictive covenants. To the extent that we raise additional funds through collaborations and licensing arrangements, it may be necessary to relinquish some rights to our technologies or grant licenses on terms that may not be favorable to us.

To minimize dilution to our equity holders, we are also exploring non-dilutive financing options, which could include licenses or collaborations and/or sales of certain assets or business lines. To the extent that we raise additional funds through collaborations and licensing arrangements, it may be necessary to relinquish some rights to our technologies or grant licenses on terms that may not be favorable to us. To the extent that we raise additional funds through strategic transactions, including a sale of one of our lines of business, we may not ultimately realize the value of or synergies from such transactions and our long-term prospects could be diminished as a result of the divestiture of these assets. We may also be required to use some or all of these sale proceeds to pay down indebtedness, which would then not serve to increase our working capital.

If we are not able to obtain adequate funding when needed, we may be required to delay development programs or other initiatives. If we are unable to raise additional capital in sufficient amounts or on satisfactory terms, we may have to make reductions in our workforce and may be prevented from continuing our discovery, development, and commercialization efforts and exploiting other corporate opportunities. In addition, it may be necessary to work with a partner on one or more of our product candidates, which could reduce the economic value of those products to us. If we engage in strategic transactions with respect to revenue-producing assets or business lines, our revenue may be adversely affected and such transactions could negatively affect the viability of our business. Each of the foregoing may harm our business, operating results, and financial condition, and may impact our ability to continue as a going concern.

We rely on a limited number of suppliers or, in some cases, single suppliers, and may not be able to find replacements or immediately transition to alternative suppliers on a cost-effective basis, or at all.

We source components of our technology from third parties and certain components are sole sourced. Obtaining substitute components may be difficult or require us to re-design our products under development, including those for which we are required to obtain marketing authorization from the FDA and would need to obtain a new marketing authorization from the FDA to use a new supplier. Any natural or other disasters, acts of war or terrorism, shipping embargoes, labor unrest or political instability or similar events at our third-party manufacturers' facilities that cause a loss of manufacturing capacity or a reduction in the quality or yield of the items manufactured would heighten the risks that we face. For example, our DDS2 device under development includes complex components including circuit boards that have to be built to exacting standards, and the failure of a manufacturer to meet our requirements on time, as we have experienced in the past and continue to experience, could lead to delays in our plans for testing, pre-clinical and clinical studies and other development activities. Changes to, failure to renew or termination of our existing agreements or our inability to enter into new agreements with other suppliers could result in the loss of access to important components of our products under development and could impair, delay or suspend our commercialization efforts. Our failure to maintain a continued and cost-effective supply of high-quality components could materially and adversely harm our business, operating results, and financial condition.

The manufacturing of our precision medicine product candidates, and other products under development, is highly exacting and complex, and we depend on third parties to supply materials and manufacture certain products and components.

Manufacturing is highly exacting and complex due, in part, to strict regulatory requirements governing the manufacture of our future products and product candidates, including our medical devices with complex components including but not limited to circuit boards, diagnostic products, and pharmaceutical products. We have limited personnel with experience in, and we do not own facilities for, manufacturing any products. We depend upon our collaborators and other third parties, including sole source suppliers, to provide

raw materials meeting FDA quality standards and related regulatory requirements, manufacture devices, diagnostic products, and drug substances, produce drug products and provide certain analytical services with respect to our products and product candidates. The FDA and other regulatory authorities require that many of our products be manufactured according to cGMP regulations and that proper procedures be implemented to assure the quality of our sourcing of raw materials and the manufacture of our products. Any failure by us, our collaborators, or our third-party manufacturers to comply with cGMP and/or scale-up manufacturing processes could lead to a delay in, or failure to obtain, marketing authorizations. In addition, such failure could be the basis for action by the FDA, including issuing a warning letter, initiating a product recall or seizure, fines, imposing operating restrictions, total or partial suspension of production or injunctions and/or withdrawing marketing authorizations for products previously granted to us. To the extent we rely on a third-party manufacturer, the risk of noncompliance with cGMPs may be greater and the ability to effect corrective actions for any such noncompliance may be compromised or delayed.

Moreover, we expect that certain of our precision medicine product candidates, including PGN-600, PGN-001, PGN-OB1, and PGN-OB2, are drug/device combination products that will be regulated under the drug and biological product regulations of the Federal Food, Drug, and Cosmetic Act (the "FD&C Act"), and Public Health Service Act (the "PHSA"), based on their primary modes of action as drugs and biologics. Third-party manufacturers may not be able to comply with cGMP regulations, applicable to drug/device combination products, including applicable provisions of the FDA's drug and biologics cGMP regulations, device cGMP requirements embodied in the Quality System Regulation ("QSR"), or similar regulatory requirements outside the United States.

In addition, we or third parties may experience other problems with the manufacturing, quality control, yields, storage or distribution of our products, including equipment breakdown or malfunction, failure to follow specific protocols and procedures, problems with suppliers and the sourcing or delivery of raw materials and other necessary components, problems with software, labor difficulties, and natural disaster-related events or other environmental factors. These problems can lead to increased costs, delays to development and preclinical study timelines, lost collaboration opportunities, damage to collaborator relations, time and expense spent investigating the cause and, depending on the cause, similar losses with respect to other batches of products. For example, our DDS2 device under development includes complex components including circuit boards that have to be built to exacting standards, and the failure of a manufacturer to meet our requirements on time, as we have experienced in the past and continue to experience, could lead to delays in our plans for testing, pre-clinical and clinical studies and other development activities. If problems are not discovered before the product is released to the market, recalls, corrective actions, or product liability-related costs also may be incurred. Problems with respect to the manufacture, storage, or distribution of products could materially disrupt our business and have a material and adverse effect on our operating results and financial condition.

The ongoing COVID-19 pandemic could further materially affect our operations, as well as the business or operations of third parties with whom we conduct business. Our business could be adversely affected by the effects of other future health epidemics or pandemics in regions where we or third parties on which we rely have significant business operations.

Our business and its operations, including, but not limited to, supply chain operations, research and development activities and capital raising activities, could be adversely affected by health epidemics, including the ongoing COVID-19 pandemic, in regions where we have business operations, and such health epidemics could also cause significant disruption in the operations of third parties with whom we do business, including third parties upon whom we rely. While vaccines have shown a level of effectiveness against SARS CoV-2, variants have and may in the future cause resurgences of COVID cases, even in vaccinated individuals.

The effects of the COVID-19 pandemic have negatively impacted, and may further negatively impact, productivity and our preclinical and clinical programs and timelines, and may further disrupt our business in other ways, the magnitude of which will depend, in part, on future developments related to variants, levels of vaccination and effectiveness of various vaccines, and other limitations on our ability to conduct our business in the ordinary course. While many of the materials used in our research and development activities may be obtained from more than one supplier, port closures and other restrictions resulting from the COVID-19 pandemic or future pandemics may disrupt our supply chain or limit our ability to obtain sufficient materials to operate our business. To date, we are aware of certain suppliers for our research and development activities who have experienced operational delays directly related to the COVID-19 pandemic.

The spread of COVID-19, which has caused a broad impact globally, has affected and may further materially affect us economically. A future recession or market correction resulting from the spread of COVID-19 could materially affect our business and the value of our common stock.

In addition, our preclinical and clinical trials have been and may continue to be affected by the COVID-19 pandemic. For example, while we originally intended to commence our pilot clinical study for PIL Dx in 2020, that timeline was delayed due to circumstances and uncertainties created by the COVID-19 pandemic. If COVID-19 experiences a resurgence in the United States and elsewhere, we may experience additional disruptions that could severely impact our business, preclinical studies and clinical trials, including:

- delays in receiving authorization from local regulatory authorities to initiate our planned clinical trials;
- delays or difficulties in enrolling patients in our clinical trials;

- delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- delays in clinical sites receiving the supplies and materials needed to conduct our clinical trials, including interruption in global shipping that may affect the transport of clinical trial materials;
- changes in local regulations as part of a response to the COVID-19 pandemic that may require us to change the ways in which our clinical trials are conducted, may result in unexpected costs, or may require us to discontinue the clinical trials altogether;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption of key clinical trial activities, such as clinical trial site monitoring, or interruption of clinical trial subject visits and study procedures, due to reluctance to travel and/or mandated travel restrictions or limitations, the occurrence of which could affect the integrity of clinical trial data;
- risk that participants enrolled in our clinical trials will acquire COVID-19 while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events;
- interruptions or delays in preclinical studies due to restricted or limited operations at our research and development laboratory facilities;
- delays in necessary interactions with local regulators, ethics committees, and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees;
- limitations in employee resources that would otherwise be focused on the conduct of our clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people;
- refusal of the U.S. Food and Drug Administration (the "FDA"), to accept data from clinical trials in affected geographies; and
- interruption or delays to our sourced discovery and clinical activities.

The COVID-19 pandemic continues to evolve rapidly. Although vaccines are now available and are being distributed globally, we cannot predict the full scope, duration and severity of disruptions resulting from the COVID-19 pandemic. 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.

Beginning in the fourth quarter of 2020, we began to reallocate resources within our organization to align more closely with our business priorities. This included reducing the resources allocated to certain programs and refocusing our resources on other key areas of our business, such as our therapeutics pipeline. In addition, in June 2021, we announced a Strategic Transformation that involves certain cost realignment measures and in December 2021 we announced the sale of Avero. While we have made significant progress on these activities, we may experience difficulties in managing these changes to our organization and if unsuccessful, our financial condition and operating results may be adversely affected.

In November 2020, we approved a reduction in force that resulted in the termination of approximately 9.5% of our workforce. The reduction in force was a component of our broader efforts to materially reduce our research and development expenses by focusing on key milestones and to limit progression of other costs to track our top line performance.

In addition, on June 1, 2021, we announced a Strategic Transformation, which involves certain cost realignment measures including the discontinuation of the provision of commercial genetic laboratory-developed test services through our Ann Arbor, Michigan CLIA-certified laboratory and the termination of approximately 374 employees across the Company and Avero, which represented approximately 56% of our workforce. In December 2021, we sold our interests in Avero via an asset sale.

As a result of the Strategic Transformation, our business is refocusing on our research and development pipeline, which we expect will materially reduce our operating expenditures, more effectively allocate capital and unlock the value of our differentiated research and development pipeline.

Over several years prior to November 2020, we significantly expanded the size of our organization. As a result of the Strategic Transformation, we have been reducing certain aspects of our organization, particularly personnel within our Laboratory Operations and support and sales and marketing teams. In addition, certain of our managerial, operational, research and development, financial, and other personnel have been or will be impacted by the Strategic Transformation. Whereas, the historical addition of employees imposed significant added responsibilities on members of management, our cost realignment measures pursuant to the Strategic Transformation may impose additional obligations on existing personnel, including increased responsibilities with respect to

managing our internal development efforts effectively, while complying with our contractual obligations to contractors and other third parties, and executing on and improving our operational, financial, and management controls, reporting systems, and procedures.

Our future financial performance, our ability to successfully develop, market, and sell our products under development, and our ability to effectively implement the Strategic Transformation will each impact our needs in terms of personnel. Our management has and may continue to be required to devote a substantial amount of time to implementing the Strategic Transformation or pursuing additional strategic transactions, which may divert a disproportionate amount of attention away from day-to-day activities. Further, our future success depends on our ability to effectively implement the Strategic Transformation and the successful development and commercialization of our research and development pipeline. We cannot assure you that we will achieve the full magnitude of cost savings and reduced operating expenditures that we have disclosed that we expect the Strategic Transformation to achieve or that any of our businesses will achieve the revenues that we have disclosed that we expect them to achieve following the Strategic Transformation, as a result of unexpected costs, costs associated with the Strategic Transformation such as severance and contract terminations or otherwise. In addition, we cannot assure you that our efforts related to the Strategic Transformation will improve our financial condition due to necessarily decreased revenue, including as a result of the termination of testing services, or will increase stockholder value. Any inability to execute and evolve in accordance with the Strategic Transformation and our other business initiatives could adversely impact our financial condition and results of operations.

We may be unable to successfully divest certain assets or recover any of the costs of our investment in certain R&D programs.

In connection with our Strategic Transformation, we have divested certain assets that do not align with our current operational plans and strategies, including the sale of certain laboratory assets and the divestiture of Avero. We have explored the potential divestiture and/or out-license of other assets as well, including assets and intellectual property related to our Preecludia™ rule-out test for preeclampsia. It is possible that we will be unable to successfully divest and/or license these assets, and we may never recover any of the costs of our historical R&D investments.

On May 4, 2022, we completed the divestiture of our single-molecule detection platform and contributed all assets related to the single-molecule detection platform to newly-formed Enumera Molecular, Inc. ("Enumera"), which intends to develop and commercialize the platform. We received a minority ownership stake in Enumera in exchange for the assets. It is possible that the value of our equity stake in Enumera will decrease over time, and it is possible that we may never recover any of the costs of the historical R&D investments related to this platform.

We operate in a highly competitive business environment.

The industries in which we operate are highly competitive and require an ongoing, extensive search for technological innovation. They also require, among other things, the ability to effectively develop, test, commercialize, market, and promote products, including communicating the effectiveness, safety, and value of products to actual and prospective healthcare providers. Other competitive factors in our industries include quality and price, product technology, reputation, customer service, and access to technical information.

We expect our future products, if approved, to face substantial competition from major pharmaceutical companies, biotechnology companies, academic institutions, government agencies, and public and private research institutions. The larger competitors have substantially greater financial and human resources, as well as a much larger infrastructure than we do. For more information on our precision medicine competitors, see Part I, Item 1. "Business—Competition in Precision Medicine" in our Annual Report.

Additionally, we compete to acquire the intellectual property assets that we require to continue to develop and broaden our product pipeline. In addition to our in-house research and development efforts, we may seek to acquire rights to new intellectual property through corporate acquisitions, asset acquisitions, licensing, and joint venture arrangements. Competitors with greater resources may acquire intellectual property that we seek, and even where we are successful, competition may increase the acquisition price of such intellectual property or prevent us from capitalizing on such acquisitions, licensing opportunities, or joint venture arrangements. If we fail to compete successfully, our growth may be limited.

It is possible that developments by our competitors could make our products or technologies under development less competitive or obsolete. Our future growth depends, in part, on our ability to provide products that are more effective than those of our competitors and to keep pace with rapid medical and scientific change. Sales of any future products may decline rapidly if a new product is introduced by a competitor, particularly if a new product represents a substantial improvement over our products. In addition, the high level of competition in our industry could force us to reduce the price at which we sell our products or require us to spend more to market our products.

Many of our competitors have greater resources than we have. This enables them, among other things, to spread their marketing and promotion costs over a broader revenue base. In addition, we may not be able to compete effectively against our competitors because their products and services are superior. Our current and future competitors could have greater experience, technological and

financial resources, stronger business relationships, broader product lines and greater name recognition than us, and we may not be able to compete effectively against them. Increased competition is likely to result in pricing pressures, which could harm our revenues, operating income, or market share. If we are unable to compete successfully, we may be unable to increase or sustain our revenues or achieve or sustain profitability.

Our success depends on our ability to develop new product candidates, which is complex and costly and the results are uncertain.

Effective execution of research and development activities and the timely introduction of new products and product candidates to the market are important elements of our business strategy. However, the development of new products and product candidates is complex, costly, and uncertain and requires us to, among other factors, accurately anticipate patients', clinicians', and payors' needs, and emerging technology trends. For more information on our current research and development efforts, see Part I, Item 1. "Business—Our Research and Development Activities" in our Annual Report.

In the development of new products and product candidates, we can provide no assurance that:

- we will develop any products that meet our desired target product profile and address the relevant clinical need or commercial opportunity;
- any products that we develop will prove to be effective in clinical trials, platform validations, or otherwise;
- we will obtain necessary regulatory authorizations, in a timely manner or at all;
- any products that we develop will be successfully marketed to and ordered by healthcare providers;
- any products that we develop will be produced at an acceptable cost and with appropriate quality;
- our current or future competitors will not introduce products similar to ours that have superior performance, lower prices, or other characteristics that cause healthcare providers to recommend, and consumers to choose, such competitive products over ours; or
- third parties do not or will not hold patents in any key jurisdictions that would be infringed by our products.

These and other factors beyond our control could delay our launch of new products and product candidates.

The research and development process in our industries generally requires a significant amount of time from the research and design stage through commercialization. The launch of such new products requires the completion of certain clinical development and/or assay validations in a commercial laboratory. This process is conducted in various stages, and each stage presents the risk that we will not achieve our goals and will not be able to complete clinical development for any planned product in a timely manner. Such development and/or validation failures could prevent or significantly delay our ability to obtain FDA clearance or approval as may be necessary or desired or launch any of our planned products and product candidates. At times, it may be necessary for us to abandon a product in which we have invested substantial resources. Without the timely introduction of new product candidates, our future products may become obsolete over time and our competitors may develop products that are more competitive, in which case our business, operating results, and financial condition will be harmed.

We are still developing our precision medicine platform and are in the early stages of its development, have conducted some early preclinical studies, and limited early clinical studies, and to date have generated no precision medicine products or product revenue. There can be no assurance that we will develop any precision medicine products that deliver therapeutic solutions, or, if developed, that such product candidates will be authorized for marketing by regulatory authorities, or will be commercially successful. This uncertainty makes it difficult to assess our future prospects and financial results.

Our operations with respect to our precision medicine platform to date have been limited to developing our platform technology, undertaking preclinical studies and feasibility studies with human subjects, and conducting research to identify potential product candidates. To date, we have only conducted limited feasibility studies in humans to evaluate whether our platform localization technology enables identification of the location of our ingestible medical devices within the gastrointestinal tract as well as the function of our DDS and RSS devices.

We seek to develop a suite of ingestible capsules for both diagnostic and therapeutic solutions. However, medical device and related diagnostic and therapeutic product development is a highly speculative undertaking and involves a substantial degree of uncertainty and we are in the early stages of our development programs. Our precision medicine platform has not yet demonstrated an ability to generate revenue or successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields such as ours for precision medicine. Consequently, the ability to accurately assess the future operating results or business prospects of our precision medicine platform is significantly more limited than if we had an operating history or

approved commercial precision medicine products. Our success in developing commercial products that are based on our precision medicine platform will depend on a variety of factors, many of which are beyond our control, including, but not limited to:

- the outcomes from our product development efforts;
- competition from existing products or new products;
- the timing of regulatory review and our ability to obtain regulatory marketing authorizations of our product candidates;
- potential side effects of our product candidates that could delay or prevent receipt of marketing authorizations or cause an approved or cleared product to be taken off the market;
- our ability to attract and retain key personnel with the appropriate expertise and experience to potentially develop our product candidates; and
- the ability of third-party manufacturers to manufacture our product candidates in accordance with current good manufacturing practices ("cGMP"), for the conduct of clinical trials and, if approved or cleared, for successful commercialization.

Even if we are able to develop one or more commercial precision medicine products, we expect that the operating results of these products will fluctuate significantly from period to period due to the factors above and a variety of other factors, many of which are beyond our control, including, but not limited to:

- market acceptance of our product candidates, if approved or cleared;
- our ability to establish and maintain an effective sales and marketing infrastructure for our products;
- the ability of patients or healthcare providers to obtain coverage or sufficient reimbursement for our products;
- our ability, as well as the ability of any third-party collaborators, to obtain, maintain and enforce intellectual property rights covering our products, product candidates and technologies, and our ability to develop, manufacture and commercialize our products, product candidates, and technologies without infringing on the intellectual property rights of others; and
- our ability to attract and retain key personnel with the appropriate expertise and experience to manage our business effectively.

Accordingly, the likelihood of the success of our precision medicine platform must be evaluated in light of these many potential challenges and variables.

The development of new product candidates will require us to undertake clinical trials, which are costly, time-consuming, and subject to a number of risks.

The development of new product candidates, including development of the data necessary to obtain clearance or approval for such product candidates, is costly, time-consuming, and carries with it the risk of not yielding the desired results. The outcome of preclinical studies and early clinical trials may not be predictive of the success of later clinical trials, and interim results of clinical trials do not necessarily predict success in future clinical trials. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials after achieving positive results in earlier development, and even if we achieve positive results in earlier trials, we could face similar setbacks. The design of a clinical trial can determine whether its results will support a product candidate's marketing authorization, to the extent required, and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. In addition, preclinical and clinical data are often susceptible to varying interpretations and analyses. Many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing authorization for the product candidates. Furthermore, limited results from earlier-stage studies may not predict results from studies in larger numbers of subjects drawn from more diverse populations over a longer period of time.

Unfavorable results from ongoing preclinical studies and clinical trials could result in delays, modifications, or abandonment of ongoing or future analytical or clinical trials, or abandonment of a product development program, or may delay, limit, or prevent marketing authorizations, where required, or commercialization of our product candidates. Even if we, or our collaborators, believe that the results of clinical trials for our product candidates warrant marketing authorization, the FDA and other regulatory authorities may disagree and may not grant marketing authorizations for our product candidates.

Moreover, the FDA requires us to comply with regulatory standards, commonly referred to as the Good Clinical Practice ("GCP"), requirements, for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, safety, and welfare of trial participants are protected. Other countries' regulatory agencies

also have requirements for clinical trials with which we must comply. We also are required to register certain ongoing clinical trials and post the results of certain completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within specified timeframes. Failure to do so can result in fines, enforcement action, adverse publicity, and civil and criminal sanctions.

The initiation and completion of any clinical studies may be prevented, delayed, or halted for numerous reasons. We may experience delays in initiation or completion of our clinical trials for a number of reasons, which could adversely affect the costs, timing, or success of our clinical trials, including related to the following:

- we may be required to submit an investigational device exemption ("IDE"), application to the FDA with respect to our medical device product candidates, which must become effective prior to commencing certain human clinical trials of medical devices, and the FDA may reject our IDE application and notify us that we may not begin clinical trials;
- regulators and other comparable foreign regulatory authorities may disagree as to the design or implementation of our clinical trials;
- regulators and/or institutional review boards ("IRBs"), or other reviewing bodies may not authorize us or our investigators to commence a clinical trial, or to conduct or continue a clinical trial at a prospective or specific trial site;
- we may not reach agreement on acceptable terms with prospective contract research organizations ("CROs"), and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- clinical trials may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;
- the number of subjects or patients required for clinical trials may be larger than we anticipate, enrollment in these clinical trials may be insufficient or slower than we anticipate, and the number of clinical trials being conducted at any given time may be high and result in fewer available patients for any given clinical trial, or patients may drop out of these clinical trials at a higher rate than we anticipate;
- our third-party contractors, including those manufacturing products or conducting clinical trials on our behalf, may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- we or our investigators may have to suspend or terminate clinical trials for various reasons, including a finding that the subjects are being exposed to unacceptable health risks or based on a requirement or recommendation from regulators, IRBs or other parties due to safety signals or noncompliance with regulatory requirements;
- we may have to amend clinical trial protocols or conduct additional studies to reflect changes in regulatory requirements or guidance, which we may be required to submit to an IRB and/or regulatory authorities for re-examination;
- the cost of clinical trials may be greater than we anticipate;
- clinical sites may not adhere to the clinical protocol or may drop out of a clinical trial;
- we may be unable to recruit a sufficient number of clinical trial sites;
- regulators, IRBs, or other reviewing bodies may fail to approve or subsequently find fault with our manufacturing processes or facilities of third-party manufacturers with which we enter into agreement for clinical and commercial supplies, the supply of devices or other materials necessary to conduct clinical trials may be insufficient, inadequate or not available at an acceptable cost, or we may experience interruptions in supply;
- marketing authorization policies or regulations of the FDA or applicable foreign regulatory agencies may change in a manner rendering our clinical data insufficient for authorization; and
- our product candidates may have undesirable side effects or other unexpected characteristics.

In addition, disruptions caused by the COVID-19 pandemic may increase the likelihood that we encounter such difficulties or delays in initiating, enrolling, conducting, or completing our planned and ongoing clinical trials.

Any of these occurrences may significantly harm our business, financial condition, and prospects. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

Patient enrollment in clinical trials and completion of patient follow-up depend on many factors, including the size of the patient population, the nature of the trial protocol, the proximity of patients to clinical sites, the eligibility criteria for the clinical trial, patient compliance, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages of the product being

studied in relation to other available therapies, including any new treatments that may be approved for the indications we are investigating. For example, patients may be discouraged from enrolling in our clinical trials if the trial protocol requires them to undergo extensive post-treatment procedures or follow-up to assess the safety and efficacy of a product candidate, or they may be persuaded to participate in contemporaneous clinical trials of a competitor's product candidate. In addition, patients participating in our clinical trials may drop out before completion of the trial or experience adverse medical events unrelated to our product candidates. Delays in patient enrollment or failure of patients to continue to participate in a clinical trial may delay commencement or completion of the clinical trial, cause an increase in the costs of the clinical trial and delays, or result in the failure of the clinical trial.

Clinical trials must be also conducted in accordance with the laws and regulations of the FDA and other applicable regulatory authorities' legal requirements, regulations or guidelines, and are subject to oversight by these governmental agencies and IRBs at the medical institutions where the clinical trials are conducted. We rely on CROs and clinical trial sites to ensure the proper and timely conduct of our clinical trials and while we have agreements governing their committed activities, we have limited influence over their actual performance. We depend on our collaborators and on medical institutions and CROs to conduct our clinical trials in compliance with the FDA's GCP requirements. To the extent our collaborators or the CROs fail to enroll participants for our clinical trials, fail to conduct the study to GCP requirements, or are delayed for a significant time in the execution of trials, including achieving full enrollment, we may be affected by increased costs, program delays, or both. In addition, clinical trials that are conducted in countries outside the United States may subject us to further delays and expenses as a result of increased shipment costs, additional regulatory requirements and the engagement of non-U.S. CROs, as well as expose us to risks associated with clinical investigators who are unknown to the FDA, and different standards of diagnosis, screening and medical care.

The clinical trial process is lengthy and expensive with uncertain outcomes. We have limited data and experience regarding the safety and efficacy of our product candidates. Results of earlier studies may not be predictive of future clinical trial results, or the safety or efficacy profile for such products or product candidates.

Clinical testing is difficult to design and implement, can take many years, can be expensive, and carries uncertain outcomes. The results of preclinical studies and clinical trials of our products conducted to date and ongoing or future studies and trials of our current, planned, or future products and product candidates may not be predictive of the results of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. Our interpretation of data and results from our clinical trials do not ensure that we will achieve similar results in future clinical trials. In addition, preclinical and clinical data are often susceptible to various interpretations and analyses, and many companies that have believed their products performed satisfactorily in preclinical studies and earlier clinical trials have nonetheless failed to replicate results in later clinical trials. Products in later stages of clinical trials may fail to show the desired safety and efficacy despite having progressed through nonclinical studies and earlier clinical trials. Failure can occur at any stage of clinical testing. Our clinical studies may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical and non-clinical testing in addition to those we have planned.

Interim "top-line" and preliminary data from studies or trials that we announce or publish from time to time may change as more data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publish interim "top-line" or preliminary data from preclinical studies or clinical trials. Interim data are subject to the risk that one or more of the outcomes may materially change as more data become available. We also make assumptions, estimations, calculations, and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the top-line results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Preliminary or "top-line" data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, interim and preliminary data should be viewed with caution until the final data are available. Additionally, interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Adverse differences between preliminary or interim data and final data could seriously harm our business.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product, and our results of operations, liquidity and financial condition. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure. Any information we determine not to disclose may ultimately be deemed significant by others with respect to future decisions, conclusions, views, activities or otherwise regarding a particular product candidate or our business. If the top-line data that we report differ from final results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain marketing authorization for, and commercialize, product candidates may be harmed, which could seriously harm our business.

The results of our clinical trials may not support the use of our product candidates, or may not be replicated in later studies required for marketing authorizations.

As the healthcare reimbursement system in the United States evolves to place greater emphasis on comparative effectiveness and outcomes data, we cannot predict whether we will have sufficient data, or whether the data we have will be presented to the satisfaction of any payors seeking such data for determining coverage for our products under development, particularly in new areas such as in precision medicine diagnostic or therapeutic applications.

The administration of clinical and economic utility studies is expensive and demands significant attention from certain members of our management team. Data collected from these studies may not be positive or consistent with our existing data, or may not be statistically significant or compelling to the medical community or payors. If the results obtained from our ongoing or future studies are inconsistent with certain results obtained from our previous studies, adoption of our products would suffer and our business would be harmed.

Peer-reviewed publications regarding our product candidates may be limited by many factors, including delays in the completion of, poor design of, or lack of compelling data from clinical studies, as well as delays in the review, acceptance, and publication process. If our products under development or the underlying technology do not receive sufficient favorable exposure in peer-reviewed publications, or are not published, the rate of healthcare provider adoption of our products under development and positive reimbursement coverage decisions for our products under development could be negatively affected. The publication of clinical data in peer-reviewed journals can be a crucial step in commercializing and obtaining reimbursement for products under development, and our inability to control when, if ever, results are published may delay or limit our ability to derive sufficient revenues from any test or other product that is the subject of a study. The performance achieved in published studies might not be repeated in later studies that may be required to obtain FDA clearance or marketing authorizations should we decide for business reasons, or be required to submit applications to the FDA or other health authorities seeking such authorizations.

Our outstanding debt, and any new debt, may impair our financial and operating flexibility.

As of June 30, 2022, we had approximately \$127.1 million of Convertible Notes outstanding. Certain of our debt agreements contain various restrictive covenants.

The Indenture for our Convertible Notes does not prohibit us or our subsidiaries from incurring additional indebtedness in the future, with certain exceptions. Under the Convertible Notes, we will not, and we will not permit any subsidiary of ours to, create, incur, assume or permit to exist any lien on any property or asset now owned or later acquired by us or any subsidiary that secures any indebtedness for borrowed money, other than (i) secured indebtedness for borrowed money in existence on the date of the Indenture; (ii) permitted refinancing indebtedness incurred in exchange for, or the net proceeds of which are used to renew, refund, refinance, replace, defease or discharge any secured indebtedness for borrowed money permitted by clause (i) of this sentence; and (iii) additional secured indebtedness for borrowed money that, in an aggregate principal amount (or accredited value, as applicable), does not exceed \$15.0 million at any time outstanding.

Accordingly, we may incur a significant amount of additional indebtedness in the future. Our current indebtedness and the incurrence of additional indebtedness could have significant negative consequences for our stockholders and our business, results of operations and financial condition by, among other things:

- making it more difficult for us to satisfy our obligations under our existing debt instruments;
- increasing our vulnerability to general adverse economic and industry conditions;
- limiting our ability to obtain additional financing to fund our research, development, and commercialization activities, particularly when the availability of financing in the capital markets is limited;
- requiring a substantial portion of our cash flows from operations for the payment of principal and interest on our debt, reducing our ability to use our cash flows to fund working capital, research and development, and other general corporate requirements;
- limiting our flexibility to plan for, or react to, changes in our business and the industries in which we operate;
- further diluting our current stockholders as a result of issuing shares of our common stock upon conversion of our Convertible Notes; and
- placing us at a competitive disadvantage with competitors that are less leveraged than us or have better access to capital.

Our ability to make principal and interest payments will depend on our ability to generate cash in the future. Our business may not generate sufficient funds, and we may otherwise be unable to maintain sufficient cash reserves, to pay amounts due under our indebtedness, and our cash needs may increase in the future. If we do not generate sufficient cash to meet our debt service

requirements and other operating requirements, we may need to seek additional financing. In that case, it may be more difficult, or we may be unable, to obtain financing on terms that are acceptable to us or at all.

In addition, any future indebtedness that we may incur may contain financial and other restrictive covenants that limit our ability to operate our business, raise capital or make payments under our other indebtedness. If we fail to comply with these covenants or to make payments under our indebtedness when due, then we would be in default under that indebtedness, which could, in turn, result in that and our other indebtedness becoming immediately payable in full.

Actual or perceived failures to comply with applicable data protection, privacy, consumer protection and security laws, regulations, standards and other requirements could adversely affect our business, results of operations, and financial condition.

The global data protection landscape is rapidly evolving, and we are or may become subject to numerous state, federal, and foreign laws, requirements, and regulations governing the collection, use, disclosure, retention, and security of personal information. Implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future, and we cannot yet determine the impact future laws, regulations, standards, or perception of their requirements may have on our business. This evolution may create uncertainty in our business, affect our ability to operate in certain jurisdictions or to collect, store, transfer, use and share personal information, necessitate the acceptance of more onerous obligations in our contracts, result in liability or impose additional costs on us. The cost of compliance with these laws, regulations, and standards is high and is likely to increase in the future. Any failure or perceived failure by us to comply with federal, state or foreign laws or regulations, our internal policies and procedures or our contracts governing our processing of personal information could result in negative publicity, government investigations and enforcement actions, claims by third parties and damage to our reputation, any of which could have a material adverse effect on our operations, financial performance and business.

As our operations and business grow, we may become subject to or affected by new or additional data protection laws and regulations and face increased scrutiny or attention from regulatory authorities. In the United States, the manner in which we collect, use, access, disclose, transmit and store protected health information ("PHI"), is subject to the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 ("HITECH"), and the health data privacy, security and breach notification regulations issued pursuant to these statutes.

HIPAA establishes a set of national privacy and security standards for the protection of PHI, by health plans, healthcare clearinghouses, and certain healthcare providers, referred to as covered entities, and the business associates with whom such covered entities contract for services that involve the use or disclosure of PHI. HIPAA requires healthcare providers like us to develop and maintain policies and procedures with respect to PHI that is used or disclosed, including the adoption of administrative, physical, and technical safeguards to protect such information.

HIPAA further requires covered entities to notify affected individuals "without unreasonable delay and in no case later than 60 calendar days after discovery of the breach" if their unsecured PHI is subject to an unauthorized access, use or disclosure. If a breach affects 500 patients or more, covered entities must report it to the U.S. Department of Health and Human Services ("HHS"), and local media without unreasonable delay (and in no case later than 60 days after discovery of the breach), and HHS will post the name of the entity on its public website. If a breach affects fewer than 500 individuals, the covered entity must log it and notify HHS at least annually. HIPAA also implemented the use of standard transaction code sets and standard identifiers that covered entities must use when submitting or receiving certain electronic healthcare transactions, including activities associated with the billing and collection of healthcare claims.

Penalties for failure to comply with a requirement of HIPAA and HITECH vary significantly depending on the failure and could include requiring corrective actions, and/or imposing civil monetary or criminal penalties. HIPAA also authorizes state attorneys general to file suit under HIPAA on behalf of state residents. Courts can award damages, costs and attorneys' fees related to violations of HIPAA in such cases. While HIPAA does not create a private right of action allowing individuals to sue us in civil court for HIPAA violations, its standards have been used as the basis for a duty of care claim in state civil suits such as those for negligence or recklessness in the misuse or breach of PHI.

Certain states have also adopted comparable privacy and security laws and regulations, some of which may be more stringent than HIPAA. Such laws and regulations will be subject to interpretation by various courts and other governmental authorities, thus creating potentially complex compliance issues for us and our future customers and strategic partners. In addition, California enacted the California Consumer Privacy Act ("CCPA"), on June 28, 2018, which went into effect on January 1, 2020. The CCPA creates individual privacy rights for California consumers and increases the privacy and security obligations of entities handling certain personal data. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. The CCPA may increase our compliance costs and potential liability, and many similar laws have been proposed at the federal level and proposed or enacted in other states. Any liability from failure to comply with the requirements of these laws could adversely affect our financial condition.

Although we work to comply with applicable laws, regulations and standards, our contractual obligations and other legal obligations, these requirements are evolving and may be modified, interpreted and applied in an inconsistent manner from one jurisdiction to another, and may conflict with one another or other legal obligations with which we must comply. Any failure or perceived failure by us or our employees, representatives, contractors, consultants, CROs, collaborators, or other third parties to comply with such requirements or adequately address privacy and security concerns, even if unfounded, could result in additional cost and liability to us, damage our reputation, and adversely affect our business and results of operations.

Security breaches, loss of data, and other disruptions could compromise sensitive information related to our business or prevent us from accessing critical information and expose us to liability, which could adversely affect our business and reputation.

In the ordinary course of our business, including our historical testing business, we collect and store sensitive data, including PHI (such as patient medical records, including test results), and personally identifiable information. We also store business and financial information, intellectual property, research and development information, trade secrets and other proprietary and business critical information, including that of our customers, payors, and collaboration partners. We manage and maintain our data utilizing a combination of on-site systems, managed data center systems and cloud-based data center systems. We are highly dependent on information technology networks and systems, including the internet, to securely process, transmit, and store critical information. Although we take measures to protect sensitive information from unauthorized access or disclosure, our information technology and infrastructure, and that of our third-party billing and collections provider and other service providers, may be vulnerable to attacks by hackers, viruses, disruptions and breaches due to employee error or malfeasance.

A security breach or privacy violation that leads to unauthorized access, disclosure or modification of, or prevents access to, patient information, including PHI, could compel us to comply with state and federal breach notification laws, subject us to mandatory corrective action and require us to verify the correctness of database contents. Such a breach or violation also could result in legal claims or proceedings brought by a private party or a governmental authority, liability under laws and regulations that protect the privacy of personal information, such as HIPAA, HITECH, and laws and regulations of various U.S. states and foreign countries, as well as penalties imposed by the Payment Card Industry Security Standards Council for violations of the Payment Card Industry Data Security Standards. If we are unable to prevent such security breaches or privacy violations or implement satisfactory remedial measures, we may suffer loss of reputation, financial loss and civil or criminal fines or other penalties because of lost or misappropriated information. In addition, these breaches and other forms of inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above.

Unauthorized access, loss or dissemination of information could disrupt our operations, including our ability to process claims and appeals, provide customer assistance services, conduct research and development activities, develop and commercialize tests, collect, process and prepare company financial information, provide information about tests, educate patients and healthcare providers about our service, and manage the administrative aspects of our business, any of which could damage our reputation and adversely affect our business. Any breach could also result in the compromise of our trade secrets and other proprietary information, which could adversely affect our competitive position.

In addition, health-related, privacy, and data protection laws and regulations in the United States and elsewhere are subject to interpretation and enforcement by various governmental authorities and courts, resulting in complex compliance issues and the potential for varying or even conflicting interpretations, particularly as laws and regulations in this area are in flux. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our practices. If so, this could result in government-imposed fines or orders requiring that we change our practices, which could adversely affect our business and our reputation. Complying with these laws could cause us to incur substantial costs or require us to change our business practices and compliance procedures in a manner adverse to our business, operating results, and financial condition.

Any failure or perceived failure by us or any third-party collaborators, service providers, contractors or consultants to comply with our privacy, confidentiality, data security or similar obligations, or any data security incidents or other security breaches that result in the accidental, unlawful or unauthorized access to, use of, release of, processing of, or transfer of sensitive information, including personally identifiable information, may result in negative publicity, harm to our reputation, governmental investigations, enforcement actions, regulatory fines, litigation or public statements against us, could cause third parties to lose trust in us or could result in claims by third parties, including those that assert that we have breached our privacy, confidentiality, data security or similar obligations, any of which could have a material adverse effect on our reputation, business, financial condition or results of operations. We could be subject to fines and penalties (including civil and criminal) under HIPAA for any failure by us or our business associates to comply with HIPAA's requirements. Moreover, data security incidents and other security breaches can be difficult to detect, and any delay in identifying them may lead to increased harm. While we have implemented data security measures intended to protect our information, data, information technology systems, applications and infrastructure, there can be no assurance that such measures will successfully prevent service interruptions or data security incidents.

If we lose the services of members of our senior management team or other key employees, we may not be able to execute our business strategy.

Our success depends in large part upon the continued service of our senior management team and certain other key employees who are important to our vision, strategic direction, and culture. Our current long-term business strategy was developed in large part by our senior management team and depends in part on their skills and knowledge to implement. We may not be able to offset the impact on our business of the loss of the services of any member of our senior management or other key officers or employees or attract additional talent. The loss of any members of our senior management team or other key employees could have a material and adverse effect on our business, operating results, and financial condition.

An inability to attract and retain highly skilled employees could adversely affect our business.

To execute our business plan, we must attract and retain highly qualified personnel. Competition for qualified personnel is intense, especially for personnel in our industry and especially in the areas where our facilities are located. We have from time to time experienced, and we expect to continue to experience, difficulty in hiring and retaining employees with appropriate qualifications. Many of the companies with which we compete for experienced personnel have greater resources than we have. If we hire employees from competitors or other companies, their former employers may attempt to assert that these employees have breached their legal obligations to their former employers, resulting in a diversion of our time and resources. In addition, job candidates and existing employees often consider the value of the stock awards they receive in connection with their employment. If the perceived value of our stock awards declines, it may adversely affect our ability to attract and retain highly skilled employees. If we fail to attract new personnel or fail to retain and motivate our current personnel, our business, operating results, and financial condition could be adversely affected.

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

We expect to depend on collaborators, partners, licensees, manufacturers, and other third parties to support our product candidate development efforts, including, to manufacture our product candidates and to market, sell, and distribute any products we successfully develop. Any problems we experience with any of these third parties could delay the development, commercialization, and manufacturing of our product candidates, which could harm our results of operations. For example, following the discontinuation of genetic laboratory-developed test services in our Ann Arbor laboratory, we are unable to independently commercialize PreecludiaTM as an LDT and will be required to partner with a third-party, or potentially to license-out or sell the technology and related assets. Prior to marketing PreecludiaTM as an LDT, any future development partner would need to validate the test within their own lab, and such third party may not be successful in validating the test in their lab on a timely basis, or at all.

We cannot guarantee that we will be able to successfully negotiate agreements for, or maintain relationships with, collaborators, partners, licensees, manufacturers, and other third parties on favorable terms, if at all. If we are unable to obtain or maintain these agreements, we may not be able to clinically develop, manufacture, obtain regulatory authorizations for, or commercialize any future product candidates, which will in turn adversely affect our business.

We expect to expend substantial management time and effort to enter into relationships with third parties and, if we successfully enter into such relationships, to manage these relationships. In addition, substantial amounts will be paid to third parties in these relationships. However, we cannot control the amount or timing of resources our future contract partners will devote to our research and development programs and products under development, and we cannot guarantee that these parties will fulfill their obligations to us under these arrangements in a timely fashion, if at all. In addition, while we manage the relationships with third parties, we cannot control all of the operations of and protection of intellectual property by such third parties.

We rely on third parties for matters related to the design of our product candidates and for our preclinical research and clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials.

We rely and expect to continue to rely on third parties, such as engineering firms, CROs, clinical data management organizations, medical institutions, and clinical investigators, to conduct and manage certain aspects of the design, preclinical testing, and clinical trials for our products under development. Our reliance on these third parties for research and development activities reduces our control over these activities but does not relieve us of our responsibilities. For example, we remain responsible for ensuring that each of our clinical trials is conducted in accordance with GCP requirements, the general investigational plan, and the protocols established for such trials.

These third parties may be slow to recruit patients and complete the studies. Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. If these third parties do not successfully carry out their contractual duties, do not meet expected deadlines, experience work stoppages, terminate their agreements with us or need to be replaced, or do not conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we may need to enter into new arrangements with alternative third parties, which could be difficult, costly or impossible, and our clinical trials may be extended, delayed, or terminated or may need to be repeated. If any of the foregoing occur, we may not be able to obtain, or may be delayed in obtaining, marketing authorizations for our product candidates and may not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates.

Even if our newly developed product candidates receive marketing authorizations, to the extent required, they may fail to achieve market acceptance.

If we can develop enhanced, improved, or new product candidates that receive marketing authorizations, they may nonetheless fail to gain sufficient market acceptance by healthcare providers, patients, third-party payors, and others in the medical community to be commercially successful. The degree of market acceptance of any of our new product candidates following receipt of marketing authorizations, if any, will depend on a number of factors, including:

- our ability to anticipate and meet customer and patient needs;
- the timing of regulatory approvals or clearances, to the extent such are required for marketing;
- the efficacy, safety and other potential advantages, such as convenience and ease of administration, of our product candidates as compared to alternative tests or treatments;
- the clinical indications for which our product candidates are approved or cleared;
- concordance with clinical guidelines established by relevant professional colleges;
- compliance with state guidelines and licensure, if applicable;
- our ability to offer our product candidates for sale at competitive prices;
- the willingness of the target patient population to try our new products, and of physicians to prescribe these products;
- the strength of our marketing and distribution support;
- the availability and requirements of third-party payor insurance coverage and adequate reimbursement for our product candidates;
- the prevalence and severity of side effects and the overall safety profiles of our product candidates;
- any restrictions on the use of our product candidates together with other products and medications;
- our ability to manufacture quality products in an economic and timely manner;
- interactions of our product candidates with other medications patients are taking; and
- for ingestible product candidates, the ability of patients to take and tolerate our product candidates.

If our newly developed product candidates are unable to achieve market acceptance, our business, operating results, and financial condition will be harmed.

Additional time may be required to obtain marketing authorizations for certain of our precision medicine product candidates because they are combination products.

Some of our precision medicine product candidates are drug/device combination products that require coordination within the FDA and similar foreign regulatory agencies for review of their device and drug components. Although the FDA and similar foreign regulatory agencies have systems in place for the review and approval of combination products such as ours, we may experience delays in the development and commercialization of our product candidates due to regulatory timing constraints and uncertainties in the product development and approval process.

Our precision medicine product candidates under development include complex medical devices that, if authorized for marketing, will require training for qualified personnel and care for data analysis.

Our precision medicine product candidates under the early stages of development include complex medical devices that, if authorized for marketing, will require training for qualified personnel, including physicians, and care for data analysis. Although we will be required to ensure that our precision medicine product candidates are prescribed only by trained professionals, the potential for misuse of our precision medicine product candidates, if authorized for marketing, still exists due to their complexity. Such misuse could result in adverse medical consequences for patients that could damage our reputation, subject us to costly product liability litigation, and otherwise have a material and adverse effect on our business, operating results, and financial condition.

The successful discovery, development, manufacturing, and sale of biologics is a long, expensive, and uncertain process and carries unique risks and uncertainties. Moreover, even if successful, our biologic products may be subject to competition from biosimilars.

We may develop product candidates regulated as biologics in the future in connection with our precision medicine platform. The successful development, manufacturing, and sale of biologics is a long, expensive, and uncertain process. There are unique risks and

uncertainties with biologics. For example, access to and supply of necessary biological materials, such as cell lines, may be limited and governmental regulations restrict access to and regulate the transport and use of such materials. In addition, the testing, development, approval, manufacturing, distribution, and sale of biologics is subject to applicable provisions of the FD&C Act, PHSA, and regulations issued thereunder that are often more complex and extensive than the regulations applicable to other pharmaceutical products or to medical devices. Manufacturing biologics, especially in large quantities, is often complicated and may require the use of innovative technologies. Such manufacturing also requires facilities specifically designed and validated for this purpose and sophisticated quality assurance and quality control procedures. Biologics are also frequently costly to manufacture because production inputs are derived from living animal or plant material, and some biologics cannot be made synthetically.

Failure to successfully discover, develop, manufacture, and sell biologics could adversely impact our business, operating results, and financial condition.

Even if we are able to successfully develop biologics in the future, the Biologics Price Competition and Innovation Act ("BPCIA"), created a framework for the approval of biosimilars in the United States that could allow competitors to reference data from any future biologic products for which we receive marketing approvals and otherwise increase the risk that any product candidates for which we intend to seek approval as biologic products may face competition sooner than anticipated. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the original biologic was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full Biologics License Application ("BLA"), for the competing product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity, and potency of their product. The BPCIA is complex and is still being interpreted and implemented by the FDA. As a result, the law's ultimate impact, implementation, and meaning are subject to uncertainty. While it is uncertain when such processes intended to implement the BPCIA may be fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects for our biological product candidates.

In addition, there is a risk that any of our product candidates regulated as a biologic and licensed under a BLA would not qualify for the 12-year period of exclusivity or that this exclusivity could be shortened due to congressional action or otherwise, potentially creating the opportunity for generic competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have been the subject of litigation. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

In Europe, the European Commission has granted marketing authorizations for several biosimilars pursuant to a set of general and product class-specific guidelines for biosimilar approvals issued over the past few years. In addition, companies are developing biosimilars in other countries that could compete with any biologic products that we develop. If competitors are able to obtain marketing approval for biosimilars referencing any biologic products that we develop, our product candidates may become subject to competition from such biosimilars, with the attendant competitive pressure and consequences. Expiration or successful challenge of our applicable patent rights could also trigger competition from other products, assuming any relevant exclusivity period has expired. As a result, we could face more litigation and administrative proceedings with respect to the validity and/or scope of patents relating to our biologic products.

If our future pharmaceutical product candidates are not approved by regulatory authorities, including the FDA, we will be unable to commercialize them.

In the future, we may develop pharmaceutical product candidates using our precision medicine platform that require FDA approval of a New Drug Application ("NDA"), or a BLA before marketing or sale in the United States. In the NDA or BLA process, we, or our collaborative partners, must provide the FDA and similar foreign regulatory authorities with data from preclinical and clinical studies that demonstrate that our product candidates are safe and effective, or in the case of biologics, safe, pure, and potent, for a defined indication before they can be approved for commercial distribution. The FDA or foreign regulatory authorities may disagree with our clinical trial designs and our interpretation of data from preclinical studies and clinical trials. The processes by which regulatory approvals are obtained from the FDA and foreign regulatory authorities to market and sell a new product are complex, require a number of years, depend upon the type, complexity, and novelty of the product candidate, and involve the expenditure of substantial resources for research, development, and testing. The FDA and foreign regulatory authorities have substantial discretion in the drug approval process and may require us to conduct additional nonclinical and clinical testing or to perform post-marketing studies. Further, the implementation of new laws and regulations, and revisions to FDA clinical trial design guidance, may lead to increased uncertainty regarding the approvability of new drugs.

Applications for our drug or biologic product candidates could fail to receive regulatory approval for many reasons, including but not limited to the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design, implementation or results of our or our collaborators' clinical trials;

- the FDA or comparable foreign regulatory authorities may determine that our product candidates are not safe and effective, only moderately effective or have undesirable or unintended side effects, toxicities or other characteristics;
- the population studied in the clinical program may not be sufficiently broad or representative to assure efficacy and safety in the full population for which we seek approval;
- we or our collaborators may be unable to demonstrate to the FDA, or comparable foreign regulatory authorities that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our or our collaborators' interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of a BLA, NDA, or other submission or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes, test procedures and specifications, or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our or our collaborators' clinical data insufficient for approval.

This lengthy approval process, as well as the unpredictability of the results of clinical trials, may result in our failing to obtain regulatory approval to market any of our product candidates, which would seriously harm our business. In addition, the FDA may recommend advisory committee meetings for certain new molecular entities, and if warranted, require a Risk Evaluation and Mitigation Strategy ("REMS"), to assure that a drug's benefits outweigh its risks. Even if we receive regulatory approval of a product, the approval may limit the indicated uses for which the drug may be marketed or impose significant restrictions or limitations on the use and/or distribution of such product.

In addition, in order to market any pharmaceutical or biological product candidates that we develop in foreign jurisdictions, we, or our collaborative partners, must obtain separate regulatory approvals in each country. The approval procedure varies among countries and can involve additional testing, and the time required to obtain approval may differ from that required to obtain FDA approval. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or by the FDA. Conversely, failure to obtain approval in one or more jurisdictions may make approval in other jurisdictions more difficult. These laws, regulations, additional requirements and changes in interpretation could cause non-approval or further delays in the FDA's or other regulatory authorities' review and approval of our and our collaborative partner's product candidates, which would materially harm our business and financial condition and could cause the price of our securities to fall.

The marketing authorization process is expensive, time-consuming, and uncertain, and we may not be able to obtain or maintain authorizations for the commercialization of some or all of our product candidates.

The product candidates associated with our precision medicine platform and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, and distribution, export, and import, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by the European Medicines Agency and comparable regulatory authorities in other countries. We have not received authorization to market any of our product candidates from regulatory authorities in any jurisdiction. Failure to obtain marketing authorization for a product candidate will prevent us from commercializing the product candidate.

Securing marketing authorizations may require the submission of extensive preclinical and clinical data and other supporting information to the various regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy, or in the case of product candidates regulated as biologics, such product candidate's safety, purity, and potency. Securing regulatory authorization generally requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the relevant regulatory authority. Our product candidates may not be effective, may be only moderately effective, or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing authorization or prevent or limit commercial use.

The process of obtaining marketing authorizations, both in the United States and abroad, is expensive, may take many years if additional clinical trials are required, if authorization is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity, and novelty of the product candidates involved. Changes in marketing authorization policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. The FDA and comparable authorities in other countries have substantial discretion in the approval process and may refuse to accept any application we submit, or may decide that our data is insufficient for approval and require additional preclinical, clinical, or other studies. In addition, varying interpretations

of the data obtained from preclinical and clinical testing could delay, limit, or prevent marketing authorization of a product candidate. Any marketing authorization we or our collaborators ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved medicine not commercially viable.

Accordingly, if we or our collaborators experience delays in obtaining authorization or if we or they fail to obtain authorization of our product candidates, the commercial prospects for our product candidates may be harmed and our ability to generate revenue will be materially impaired.

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

The use of our product candidates could be associated with side effects or adverse events, which can vary in severity (from minor reactions to death) and frequency (infrequent or prevalent). Side effects or adverse events associated with the use of our product candidates may be observed at any time, including in clinical trials or when a product is commercialized. Undesirable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory authorization by the FDA or other comparable foreign authorities. Results of our trials could reveal a high and unacceptable severity and prevalence of side effects such as toxicity or other safety issues and could require us or our collaboration partners to perform additional studies or halt development or sale of these product candidates or expose us to product liability lawsuits, which would harm our business and financial results. In such an event, we may be required by regulatory agencies to conduct additional animal or human studies regarding the safety and efficacy of our product candidates, which we have not planned or anticipated or our studies could be suspended or terminated, and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny or withdraw approval of our product candidates for any or all targeted indications. There can be no assurance that we will resolve any issues related to any product-related adverse events to the satisfaction of the FDA or any other regulatory agency in a timely manner, if ever, which could harm our business, operating results, financial condition and prospects.

Additionally, product quality characteristics have been shown to be sensitive to changes in process conditions, manufacturing techniques, equipment or sites and other such related considerations, hence any manufacturing process changes we implement prior to or after regulatory authorization could impact product safety and efficacy.

Product-related side effects could affect patient recruitment for clinical trials, the ability of enrolled patients to complete our studies or result in potential product liability claims. We currently carry product liability insurance and we are required to maintain product liability insurance pursuant to certain of our license agreements. We believe our product liability insurance coverage is sufficient in light of our current clinical programs; however, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability, or such insurance coverage may not be sufficient to cover all losses. A successful product liability claim or series of claims brought against us could adversely affect our business, operating results, and financial condition. In addition, regardless of merit or eventual outcome, product liability claims may result in impairment of our business reputation, withdrawal of clinical study participants, costs due to related litigation, distraction of management's attention from our primary business, initiation of investigations by regulators, substantial monetary awards to patients or other claimants, the inability to commercialize our product candidates and decreased demand for our product candidates, if authorized for commercial sale. Additionally, if one or more of our product candidates receives marketing authorization, and we or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including but not limited to:

- regulatory authorities may suspend, limit or withdraw marketing authorizations for such products, or seek an injunction against their manufacture or distribution;
- regulatory authorities may require additional warnings on the label including "boxed" warnings, or issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the product;
- we may be required to change the way the product is administered or conduct additional clinical trials or post-approval studies;
- we may be required to create a REMS plan, which could include a medication guide outlining the risks of such side effects for distribution to patients, a communication plan for healthcare providers and/or other elements to assure safe use;
- the product may become less competitive;
- we may be subject to fines, injunctions or the imposition of criminal penalties;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of a particular product candidate, if approved, and could significantly harm our business, operating results, financial condition, and prospects.

If we receive marketing authorization, regulatory agencies including the FDA and foreign authorities enforce requirements that we report certain information about adverse medical events. For example, under FDA medical device reporting regulations, medical device manufacturers are required to report to the FDA information that a device has or may have caused or contributed to a death or serious injury or has malfunctioned in a way that would likely cause or contribute to a death or serious injury if the malfunction of our device (or any similar future product) were to recur. We may fail to appreciate that we have become aware of a reportable adverse event, especially if it is not reported to us as an adverse event or if it is an adverse event that is unexpected or removed in time from the use of our products. If we fail to investigate and report these events to the FDA within the required timeframes, or at all, the FDA could take enforcement action against us. Any such adverse event involving our products also could result in future corrective actions, such as recalls or customer notifications, or agency action, such as inspection or enforcement action. Any corrective action, whether voluntary or involuntary, including any legal action taken against us, will require us to devote significant time and capital to the matter, distract management from operating our business, and may harm our reputation and financial results.

We may not comply with laws regulating the protection of the environment and health and human safety.

Our research and development involves, or may in the future involve, the use of hazardous materials and chemicals and certain radioactive materials and related equipment. If an accident occurs, we could be held liable for resulting damages, which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens and the handling of biohazardous materials. Insurance may not provide adequate coverage against potential liabilities, and we do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us. Additional federal, state, and local laws and regulations affecting our operations may be adopted in the future. We may incur substantial costs to comply with, and substantial fines or penalties if we violate, any of these laws or regulations.

Our operating results may fluctuate significantly, which could adversely impact the value of our common stock.

Our operating results, including our revenues, gross margin, profitability, and cash flows, have varied in the past and may vary significantly in the future, and period-to-period comparisons of our operating results may not be meaningful. Accordingly, our results should not be relied upon as an indication of future performance. Our operating results, including quarterly financial results, may fluctuate as a result of a variety of factors, many of which are outside of our control. Fluctuations in our results may adversely impact the value of our common stock. Factors that may cause fluctuations in our financial results include, without limitation, those listed elsewhere in this “Risk Factors” section. In addition, as we increase our research and development efforts, we expect to incur costs in advance of achieving the anticipated benefits of such efforts.

We may engage in acquisitions that could disrupt our business, cause dilution to our stockholders, or reduce our financial resources.

We have in the past entered into, and may in the future enter into, transactions to acquire other businesses, products, or technologies. Successful acquisitions require us to correctly identify appropriate acquisition candidates and to integrate acquired products or operations and personnel with our own.

Should we make an error in judgment when identifying an acquisition candidate, should the acquired operations not perform as anticipated, or should we fail to successfully integrate acquired technologies, operations, or personnel, we will likely fail to realize the benefits we intended to derive from the acquisition and may suffer other adverse consequences. Acquisitions involve a number of other risks, including:

- we may not be able to make such acquisitions on favorable terms or at all;
- the acquisitions may not strengthen our competitive position, and these transactions may be viewed negatively by customers or investors;
- we may decide to incur debt with debt repayment obligations that we are unable to satisfy or that could otherwise require the use of a significant portion of our cash flow;
- we may decide to issue our common stock or other equity securities to the stockholders of the acquired company, which would reduce the percentage ownership of our existing stockholders;
- we may incur losses resulting from undiscovered liabilities of the acquired business that are not covered by any indemnification we may obtain from the seller;
- the acquisitions may reduce our cash available for operations and other uses;
- the acquisitions may divert of the attention of our management from operating our existing business; and

- the acquisitions may result in charges to earnings in the event of any write-down or write-off of goodwill and other assets recorded in connection with acquisitions.

We cannot predict the number, timing or size of future acquisitions or the effect that any such transactions might have on our business, operating results, and financial condition.

The development and expansion of our business through joint ventures, licensing and other strategic transactions may result in similar risks that reduce the benefits we anticipate from these strategic alliances and cause us to suffer other adverse consequences.

We may be significantly impacted by changes in tax laws and regulations or their interpretation.

U.S. and foreign governments continue to review, reform and modify tax laws. Changes in tax laws and regulations could result in material changes to the domestic and foreign taxes that we are required to provide for and pay. In addition, we are subject to regular audits with respect to our various tax returns and processes in the jurisdictions in which we operate. Errors or omissions in tax returns, process failures, or differences in interpretation of tax laws by tax authorities and us may lead to litigation, payments of additional taxes, penalties, and interest. On December 22, 2017, the Tax Cuts and Jobs Act of 2017 ("TCJA"), was passed into law. The TCJA has given rise to significant one-time and ongoing changes, including but not limited to a federal corporate tax rate decrease to 21% for tax years beginning after December 31, 2017, limitations on interest expense deductions, the immediate expensing of certain capital expenditures, the adoption of elements of a partially territorial tax system, new anti-base erosion provisions, a reduction to the maximum deduction allowed for net operating losses generated in tax years after December 31, 2017 and providing for indefinite carryforwards for losses generated in tax years after December 31, 2017. The legislation is unclear in many respects and could be subject to potential amendments and technical corrections, and will be subject to interpretations and implementing regulations by the Treasury and Internal Revenue Service, any of which could mitigate or increase certain adverse effects of the legislation. In addition, it is unclear how these U.S. federal income tax changes will affect state and local taxation. Generally, future changes in applicable tax laws and regulations, or their interpretation and application, could have a material and adverse effect on our business, operating results, and financial condition.

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

As of December 31, 2021, we had net operating loss ("NOL") carryforwards of approximately \$458.2 million for federal income tax purposes, and \$221.7 million for state income tax purposes. The federal NOLs will be carried forward indefinitely and the state NOLs begin expiring in 2028. Utilization of these NOLs depends on many factors, including our future income, which cannot be assured. Some of these NOLs could expire unused and be unavailable to offset our future income tax liabilities. In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the "Code"), and corresponding provisions of state law, if a corporation undergoes an "ownership change," which is generally defined as a greater than 50 percentage point change, by value, in its equity ownership by 5% stockholders over a rolling three-year period, the corporation's ability to use its pre-change NOLs and other pre-change tax attributes to offset its post-change income may be limited. If we determine that an ownership change has occurred and our ability to use our historical NOLs is materially limited, it could harm our future operating results by effectively increasing our future tax obligations. In addition, under the TCJA, federal NOLs incurred in 2018 and in future years may be carried forward indefinitely but generally may not be carried back and the deductibility of such NOLs is limited to 80% of taxable income. On March 27, 2020, Congress enacted the Coronavirus Aid, Relief and Economic Security Act, known as the CARES Act, which provides some relief from the limitations on the utilization of NOLs and certain other tax attributes described above. During the three months ended March 31, 2020, we recorded a discrete tax benefit of \$37.7 million related to the NOL carryback provisions available under the CARES Act for taxes paid in years 2013, 2014, 2015, and 2017, which we refer to as the CARES Act Tax Benefit. We agreed to pay 65% of any tax refund received in excess of \$5.0 million in a single year, along with other civil settlements, damages awards, and tax refunds, to accelerate payments to the government in connection with our government settlement. During the year ended December 31, 2020, we received a tax refund of \$37.7 million related to the NOL carryback provisions available under the CARES Act. For the year ended December 31, 2020, we had paid a total of \$37.0 million to the government in connection with our government settlements. We did not receive any tax refunds during the year ended December 31, 2021.

Reimbursement Risks Related to Our Historical Testing Business

Billing disputes with third-party payors may decrease realized revenue and may lead to requests for recoupment of past amounts paid.

Prior to the shutdown of our Laboratory Operations, which occurred in 2021, we operated clinical laboratories and billed for tests. Payors dispute our billing or coding from time to time and we deal with requests for recoupment from third-party payors from time to time in the ordinary course of our business (see Note 10 to our condensed consolidated financial statements included elsewhere in this Quarterly Report for additional information regarding current recoupment requests). We continue to receive recoupment requests and we expect these disputes and requests for recoupment to continue for a period of time in the future. Third-party payors may decide to deny payment or recoup payment for testing that they contend to have been not medically necessary, against their coverage determinations, or for which they have otherwise overpaid, and we may be required to refund reimbursements already received. We have entered into settlement agreements with government and commercial payors in order to settle claims related to past

billing practices that have since been discontinued. For more information on these disputes, see Part I, Item 1. “Business—Reimbursement—Commercial Third-Party Payors” in our Annual Report. Additionally, the Patient Protection and Affordable Care Act, as amended by the Healthcare and Education Reconciliation Act of 2010 (collectively, the “ACA”), enacted in March 2010, requires providers and suppliers to report and return any overpayments received from government payors under the Medicare and Medicaid programs within 60 days of identification. Failure to identify and return such overpayments exposes the provider or supplier to liability under federal false claims laws and the OIG’s healthcare enforcement authorities, and would be a potential violation of our obligations under our Corporate Integrity Agreement to report substantial overpayments to the OIG. Claims for recoupment also require the time and attention of our management and other key personnel, which can be a distraction from operating our business.

If a third-party payor successfully challenges that payment to us for prior testing was in breach of contract or otherwise contrary to policy or law, they may recoup payment, which amounts could be significant and would impact our operating results and financial condition. We may also decide to negotiate and settle with a third-party payor in order to resolve an allegation of overpayment. In the past, we have negotiated and settled these types of claims with third-party payors. We may be required to resolve further disputes in the future. For example, on November 16, 2020, we received a letter from Anthem informing us that Anthem is seeking recoupment for historical payments made by Anthem in an aggregate amount of approximately \$27.4 million. The historical payments for which Anthem is seeking recoupment are claimed to relate primarily to discontinued legacy billing practices for our NIPT and microdeletion tests and secondarily to the implementation of the new CPT code for reimbursement for our Preparent expanded carrier screening tests. We can provide no assurance that we will not receive similar claims for recoupment from other third-party payors in the future. For more information on this claim, see Part I, Item 1. “Business—Reimbursement—Payor Dispute” in our Annual Report. Any of these outcomes, including recoupment or reimbursements, might also require us to restate our financials from a prior period, any of which could have a material and adverse effect on our business, operating results, and financial condition.

If the validity of an informed consent from a patient is challenged, we could be forced to refund amounts previously paid by third-party payors, or to exclude a patient’s data from clinical trial results.

We are required to ensure that all clinical data and blood samples that we receive have been collected from subjects who have provided appropriate informed consent for us to perform testing in clinical trials. We seek to ensure that the subjects from whom the data and samples are collected do not retain or have conferred on them any proprietary or commercial rights to the data or any discoveries derived from them. A subject’s informed consent could be challenged in the future, and the informed consent could prove invalid, unlawful, or otherwise inadequate for our purposes. Any such findings against us, or our partners, could deny us access to, or force us to stop, testing samples in a particular area or could call into question the results of our clinical trials. In addition, we could be requested to refund amounts previously paid by third-party payors for tests where an informed consent is challenged. We could become involved in legal challenges, which could require significant management and financial resources and adversely affect our operating results.

We may be unable to obtain or maintain third-party payor coverage and reimbursement for our future tests or products.

Our future success will depend on our or our potential partners’ ability to obtain or maintain adequate reimbursement coverage from third-party payors. Third-party reimbursement for our testing historically represented a significant portion of our revenues, and we expect third-party payors such as third-party commercial payors and government healthcare programs to be a source of revenue in the future. It is to be determined whether and to what extent certain of our products under development will be covered or reimbursed. If we are unable to obtain or maintain coverage or adequate reimbursement from, or achieve in-network status with, third-party payors for our future tests or other products, our ability to generate revenues will be limited. For example, healthcare providers may be reluctant to order our tests or other products due to the potential of a substantial cost to the patient if coverage or reimbursement is unavailable or insufficient.

Regulatory and Legal Risks Related to Our Business

If we or our commercial partners act in a manner that violates healthcare laws or otherwise engage in misconduct, we could face substantial penalties and damage to our reputation, and our business operations and financial condition could be adversely affected.

We are subject to healthcare fraud and abuse regulation and enforcement by both the U.S. federal government and the states in which we conduct our business, including:

- federal and state laws and regulations governing the submission of claims, as well as billing and collection practices, for healthcare services;
- the federal Anti-Kickback Statute, which prohibits, among other things, the knowing and willful solicitation, receipt, offer or payment of remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal healthcare programs such as Medicare and Medicaid; a person does not need to have knowledge of the statute or specific intent to violate it to have committed a violation; a violation of the Anti-Kickback Statute may result in imprisonment for up to ten

years and significant fines for each violation and administrative civil money penalties, plus up to three times the amount of the remuneration paid; in addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act;

- the Eliminating Kickbacks in Recovery Act of 2018 ("EKRA"), which, among other things, prohibits knowingly or willfully paying, offering to pay, soliciting or receiving any remuneration (including any kickback, bribe, or rebate), whether directly or indirectly, overtly or covertly, in cash or in kind, to induce a referral of an individual to a recovery home, clinical treatment facility, or laboratory, or in exchange for an individual using the services of that recovery home, clinical treatment facility, or laboratory; violation of EKRA may result in significant fines and imprisonment of up to 10 years for each occurrence;
- the federal False Claims Act which prohibits, among other things, the presentation of false or fraudulent claims for payment from Medicare, Medicaid, or other government-funded third-party payors discussed in more detail below;
- federal laws and regulations governing the Medicare program, providers of services covered by the Medicare program, and the submission of claims to the Medicare program, as well as the Medicare Manuals issued by CMS and the local medical policies promulgated by the Medicare Administrative Contractors with respect to the implementation and interpretation of such laws and regulations;
- the federal Stark Law, also known as the physician self-referral law, which, subject to certain exceptions, prohibits a physician from making a referral for certain designated health services covered by the Medicare program (and according to case law in some jurisdictions, the Medicaid program as well), including laboratory and pathology services, if the physician or an immediate family member has a financial relationship with the entity providing the designated health services; a person who attempts to circumvent the Stark Law may be fined up to approximately \$165,000 for each arrangement or scheme that violates the statute; in addition, any person who presents or causes to be presented a claim to the Medicare or Medicaid programs in violation of the Stark Law is subject to significant civil monetary penalties, plus up to three times the amount of reimbursement claimed;
- the federal Civil Monetary Penalties Law, which, subject to certain exceptions, prohibits, among other things, the offer or transfer of remuneration, including waivers of copayments and deductible amounts (or any part thereof), to a Medicare or state healthcare program beneficiary if the person knows or should know it is likely to influence the beneficiary's selection of a particular provider, practitioner or supplier of services reimbursable by Medicare or a state healthcare program; any violation of these prohibitions may result in significant civil monetary penalties for each wrongful act;
- the prohibition on reassignment by the program beneficiary of Medicare claims to any party;
- HIPAA, which, among other things, imposes criminal liability for executing or attempting to execute a scheme to defraud any healthcare benefit program, willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making false, fictitious or fraudulent statements relating to healthcare matters; similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- HIPAA, as amended by HITECH, and their implementing regulations, which imposes privacy, security and breach reporting obligations with respect to individually identifiable health information upon entities subject to the law, such as health plans, healthcare clearinghouses and certain healthcare providers, known as covered entities, and their respective business associates, individuals or entities that perform services for them that involve individually identifiable health information; HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in U.S. federal courts to enforce HIPAA and seek attorneys' fees and costs associated with pursuing federal civil actions;
- the federal transparency requirements under the Physician Payments Sunshine Act, created under the ACA, which requires, among other things, certain manufacturers of drugs, devices, biologics and medical supplies reimbursed under Medicare, Medicaid, or the Children's Health Insurance Program to annually report to CMS information related to payments and other transfers of value provided to physicians, certain other healthcare professionals beginning in 2022, and teaching hospitals and physician ownership and investment interests, including such ownership and investment interests held by a physician's immediate family members; we believe that we are currently exempt from these reporting requirements; we cannot assure you, however, that regulators, principally the federal government, will agree with our determination, and a determination that we have violated these laws and regulations, or a public announcement that we are being investigated for possible violations, could adversely affect our business;

- federal and state laws and regulations governing informed consent for genetic testing and the use of genetic material;
- state law equivalents of the above U.S. federal laws, such as the Stark Law, Anti-Kickback Statute and false claims laws, which may apply to items or services reimbursed by any third-party payor, including commercial insurers; and
- similar healthcare laws in the European Union and other jurisdictions, including reporting requirements detailing interactions with and payments to healthcare providers.

Furthermore, a development affecting our industry is the increased enforcement of the federal False Claims Act and, in particular, actions brought pursuant to the False Claims Act's "whistleblower" or "qui tam" provisions. The False Claims Act imposes liability for, among other things, knowingly presenting, or causing to be presented, a false or fraudulent claim for payment by a federal governmental payor program. The qui tam provisions of the False Claims Act allow a private individual to bring civil actions on behalf of the federal government for violations of the False Claims Act and permit such individuals to share in any amounts paid by the defendant to the government in fines or settlement.

When an entity is determined to have violated the False Claims Act, it is subject to mandatory damages of three times the actual damages sustained by the government, plus significant mandatory civil penalties for each false claim. In addition, various states have enacted false claim laws analogous to the federal False Claims Act, and in some cases apply more broadly because many of these state laws apply to claims made to private payors and not merely governmental payors.

The rapid growth and expansion of our business may increase the potential for violating these laws or our internal policies and procedures designed to comply with these laws. The evolving interpretations of these laws and regulations by courts and regulators increase the risk that we may be alleged to be, or in fact found to be, in violation of these or other laws and regulations, including pursuant to private qui tam actions brought by individual whistleblowers in the name of the government as described above.

For example, in April 2018, we received a civil investigative demand from an AUSA for the Southern District of New York ("SDNY"), and a HIPAA subpoena issued by an AUSA for the Southern District of California ("SDCA"). In May 2018, we received a subpoena from the State of New York Medicaid Fraud Control Unit. The civil and criminal investigations related to discontinued legacy billing practices for our NIPT and microdeletion tests and the provision of alleged kickbacks or inducements to physicians and patients and the civil investigations also involved inquiries about our laboratory licenses, our enrollment in state Medicaid programs, and the laboratories that performed testing for us.

On July 21, 2020, July 23, 2020, and October 1, 2020, we entered into agreements with certain governmental agencies and the 45 states participating in the settlement (the "State AGs"), to resolve, with respect to such agencies and State AGs, all of such agencies' and State AGs' outstanding civil, and, where applicable, federal criminal, investigations regarding our discontinued legacy billing practices for our non-invasive prenatal tests and microdeletion tests and the provision of alleged kickbacks or inducements to physicians and patients. Specifically, we entered into:

- a civil settlement agreement, effective July 23, 2020, with the DOJ through SDNY, and on behalf of the OIG and with the relator named therein (the "SDNY Civil Settlement Agreement");
- a civil settlement agreement, effective July 23, 2020, with the DOJ through SDCA, and on behalf of the Defense Health Agency, the Tricare Program and the Office of Personnel Management, which administers the Federal Employees Health Benefits Program (the "SDCA Civil Settlement Agreement");
- a non-prosecution agreement, effective July 21, 2020, with SDCA (the "Non-Prosecution Agreement"), in resolution of all criminal allegations (which agreement has since expired);
- a corporate integrity agreement, effective July 21, 2020, with the OIG (the "Corporate Integrity Agreement"); and
- civil settlement agreements, effective October 1, 2020, with the State AGs.

The terms of these agreements require that we pay \$49.0 million in the aggregate plus applicable interest. As of December 31, 2021, we have paid approximately \$41.9 million towards this amount. We will pay the remaining portion of the settlement over an approximately two-year period, structured as follows: approximately \$6.9 million in December 2022; and approximately \$0.2 million in December 2023. For additional information regarding these agreements, please see Part I, Item 3. "Legal Proceedings—Federal Investigations" in our Annual Report.

Our inability to obtain, on a timely basis or at all, any necessary marketing authorizations for new device products or improvements could adversely affect our future product commercialization and operating results.

Our product candidates are expected to be subject to regulation by the FDA, and numerous other federal and state governmental authorities. The process of obtaining regulatory approvals or clearances to market a medical device, particularly from the FDA and regulatory authorities outside the United States, can be costly and time-consuming, and approvals or clearances might not be granted

for future products on a timely basis, if at all. To ensure ongoing customer safety, regulatory agencies such as the FDA may re-evaluate their current approval or clearance processes and may impose additional requirements. In addition, the FDA and other regulatory authorities may impose increased or enhanced regulatory inspections for domestic or foreign facilities involved in the manufacture of medical devices.

We may develop new medical devices in connection with our precision medicine platform and new molecular test candidates that are regulated by the FDA as medical devices. Unless otherwise exempted, medical devices must receive one of the following marketing authorizations from the FDA before being marketed in the United States: “510(k) clearance,” de novo classification, or PMA. The FDA determines whether a medical device will require 510(k) clearance, de novo classification, or the PMA process based on statutory criteria that include the risk associated with the device and whether the device is similar to an existing, legally marketed product. In the 510(k) clearance process, before a device may be marketed, the FDA must determine that a proposed device is “substantially equivalent” to a legally-marketed “predicate” device, which includes a device that has been previously cleared through the 510(k) process, a device that was legally marketed prior to May 28, 1976 (pre-amendments device), a device that was originally on the U.S. market pursuant to an approved PMA and later down-classified, or a 510(k)-exempt device. To be “substantially equivalent,” the proposed device must have the same intended use as the predicate device, and either have the same technological characteristics as the predicate device or have different technological characteristics and not raise different questions of safety or effectiveness than the predicate device. Clinical data are sometimes required to support substantial equivalence. In the process of obtaining PMA approval, the FDA must determine that a proposed device is safe and effective for its intended use based, in part, on extensive data, including, but not limited to, technical, preclinical, clinical trial, manufacturing, and labeling data. The PMA process is typically required for devices that are deemed to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices. The process to obtain either 510(k) clearance or PMA will likely be costly, time-consuming, and uncertain. However, we believe the PMA process is generally more challenging. Even if we design a product that we expect to be eligible for the 510(k) clearance process, the FDA may require that the product undergo the PMA process. There can be no assurance that the FDA will approve or clear the marketing of any new medical device product that we develop. Even if regulatory approval or clearance is granted, such approval may include significant limitations on indicated uses, which could materially and adversely affect the prospects of the new medical device product.

If a medical device is novel and has not been previously classified by the FDA as Class I, II, or III, it is automatically classified into Class III regardless of the level of risk it poses. The Food and Drug Administration Modernization Act of 1997 established a route to market for low to moderate risk medical devices that are automatically placed into Class III due to the absence of a predicate device, called the “Request for Evaluation of Automatic Class III Designation,” or the de novo classification procedure. This procedure allows a manufacturer whose novel device would automatically be classified into Class III to request down-classification of its medical device into Class I or Class II on the basis that the device presents low or moderate risk, rather than requiring the submission and approval of a PMA application.

FDA marketing authorization could not only be required for new products we develop, but also could be required for certain enhancements we may seek to make to our future products. Delays in receipt of, or failure to obtain, marketing authorizations could materially delay or prevent us from commercializing our products or result in substantial additional costs that could decrease our profitability. In addition, even if we receive FDA or other regulatory marketing authorizations for a new or enhanced product, the FDA or such other regulator may condition, withdraw, or materially modify its marketing authorization.

We are subject to costly and complex laws and governmental regulations.

Our precision medicine product candidates are subject to a complex set of regulations and rigorous enforcement, including by the FDA, DOJ, HHS, and numerous other federal, state, and non-U.S. governmental authorities. To varying degrees, each of these agencies requires us to comply with laws and regulations governing the development, testing, manufacturing, labeling, marketing, and distribution of our product candidates, if approved. As a part of the regulatory process of obtaining marketing authorization for new products and modifications to products, we may conduct and participate in numerous clinical trials with a variety of study designs, patient populations, and trial endpoints. Unfavorable or inconsistent clinical data from existing or future clinical trials or the market’s or FDA’s perception of this clinical data, may adversely impact our ability to obtain product approvals, our position in, and share of, the markets in which we participate, and our business, operating results, and financial condition. We cannot guarantee that we will be able to obtain or maintain marketing authorization for our product candidates and/or enhancements or modifications to products, and the failure to maintain or obtain marketing authorization in the future could have a material and adverse effect on our business, operating results, financial condition.

Both before and after a product is commercially released, we and our products are subject to ongoing and pervasive oversight of government regulators. For instance, in the case of any product candidates subject to regulation by the FDA, including those products candidates in connection with our precision medicine platform, our facilities and procedures and those of our suppliers will be subject to periodic inspections by the FDA to determine compliance with applicable regulations. The results of these inspections can include inspectional observations on FDA’s Form-483, warning letters, or other forms of enforcement. If the FDA or a non-U.S. regulatory agency were to conclude that we are not in compliance with applicable laws or regulations, or that any of our product candidates, if authorized for marketing, are ineffective or pose an unreasonable health risk, the FDA or such other non-U.S. regulatory agency could ban products, withdraw marketing authorizations for such products, detain or seize adulterated or misbranded products, order a recall,

repair, replacement, or refund of such products, refuse to grant pending marketing applications, require certificates of non-U.S. governments for exports, and/or require us to notify health professionals and others that the products present unreasonable risks of substantial harm to the public health. The FDA and other non-U.S. regulatory agencies may also assess civil or criminal penalties against us, our officers, or employees and impose operating restrictions on a company-wide basis. The FDA may also recommend prosecution to the DOJ. Any adverse regulatory action, depending on its magnitude, may restrict us from effectively marketing and selling our products and limit our ability to obtain future marketing authorizations, and could result in a substantial modification to our business practices and operations. Furthermore, we occasionally receive investigative demands, subpoenas, or other requests for information from state and federal governmental agencies, and we cannot predict the timing, outcome, or impact of any such investigations. See Part I, Item 3. "Legal Proceedings" in our Annual Report. Any adverse outcome in one or more of these investigations could include the commencement of civil and/or criminal proceedings, substantial fines, penalties, and/or administrative remedies, including exclusion from government reimbursement programs and/or amendments to our corporate integrity agreement with the OIG. In addition, resolution of any of these matters could involve the imposition of additional, costly compliance obligations. These potential consequences, as well as any adverse outcome from government investigations, could have a material and adverse effect on our business, operating results, and financial condition.

We and our commercial partners and contract manufacturers are subject to significant regulation with respect to manufacturing medical devices and therapeutic products. The manufacturing facilities on which we rely may not continue to meet regulatory requirements or may not be able to meet supply demands.

Entities involved in the preparation of medical devices and/or therapeutic products for clinical studies or commercial sale, including our manufacturers for the therapeutic products that we may develop, are subject to extensive regulation. Components of a finished medical device or therapeutic product approved for commercial sale or used in late-stage clinical studies must be manufactured in accordance with cGMP and/or QSR requirements. These regulations govern manufacturing processes and procedures (including record keeping) and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Poor control of production processes can lead to the introduction of contaminants or to inadvertent changes in the properties or stability of our product candidates that may not be detectable in final product testing. We, our collaboration partners or our contract manufacturers must supply all necessary documentation in support of an NDA, a BLA, a PMA, a 510(k) application, a request for de novo classification, or a Marketing Authorization Application ("MAA"), on a timely basis and must adhere to cGMP regulations enforced by the FDA and other regulatory agencies through their facilities inspection program. Some of our contract manufacturers may have never produced a commercially approved pharmaceutical product and therefore have not been subject to the review of the FDA and other regulators. The facilities and quality systems of some or all of our collaboration partners and third-party contractors must pass a pre-approval inspection for compliance with the applicable regulations as a condition of regulatory approval of our drug and biologic product candidates and may be subject to inspection in connection with a MAA for any of our other potential product candidates. In addition, the regulatory authorities may, at any time, audit or inspect a manufacturing facility involved with the preparation of our product candidates or our other potential products or the associated quality systems for compliance with the regulations applicable to the activities being conducted. Although we oversee our contract manufacturers, we cannot control the manufacturing process of, and are completely dependent on, such contract manufacturing partners for compliance with these regulatory requirements. If these facilities do not pass a pre-approval plant inspection, marketing authorizations for the products may not be granted or may be substantially delayed until any violations are corrected to the satisfaction of the regulatory authority, if ever.

The regulatory authorities also may, at any time following approval or clearance of a product for sale, audit the manufacturing facilities of our collaboration partners and third-party contractors. If any such inspection or audit identifies a failure to comply with applicable regulations or if a violation of our product specifications or applicable regulations occurs independent of such an inspection or audit, we or the relevant regulatory authority may require remedial measures that may be costly and/or time-consuming for us or a third party to implement and that may include the temporary or permanent suspension of a clinical study or commercial sales or the temporary or permanent closure of a facility.

Any such remedial measures imposed upon us or third parties with whom we contract could materially harm our business.

If we, our collaboration partners or any of our third-party manufacturers fail to maintain regulatory compliance, the FDA or other applicable regulatory authority can impose regulatory sanctions including, among other things, refusal to approve a pending application for a new product candidate, withdrawal of a marketing authorization or suspension of production. As a result, our business, operating results, and financial condition may be materially harmed.

Additionally, if supply from one approved manufacturer is interrupted, an alternative manufacturer will need to be qualified and we may need to obtain marketing authorization for a change in the manufacturer through submission of a PMA supplement, 510(k) pre-market notification, NDA or BLA supplement, MAA variation or other regulatory filing to the FDA or other foreign regulatory agencies, which could result in further delay.

These factors could cause us to incur additional costs and could cause the delay or termination of clinical studies, regulatory submissions, required marketing authorizations or commercialization of our products under development. Furthermore, if our

suppliers fail to meet contractual requirements and we are unable to secure one or more replacement suppliers capable of production at a substantially equivalent cost, our clinical studies may be delayed or we could lose potential revenue.

If the FDA does not conclude that certain of our product candidates satisfy the requirements for the Section 505(b)(2) regulatory approval pathway, or if the requirements for such product candidates under Section 505(b)(2) are not as we expect, the approval pathway for those product candidates will likely take significantly longer, cost significantly more and entail significantly greater complications and risks than anticipated, and in either case may not be successful.

We are developing proprietary product candidates, such as PGN-600, a GI-targeted tofacitinib, for which we may seek FDA approval through the Section 505(b)(2) regulatory pathway. We expect that PGN-600 will be regulated as a drug/device combination product under the drug provisions of the FD&C Act, enabling us to submit NDAs for approval of this product candidate. The Drug Price Competition and Patent Term Restoration Act of 1984, also known as the Hatch-Waxman Act, added Section 505(b)(2) to the FD&C Act. Section 505(b)(2) permits the filing of an NDA where at least some of the information required for approval comes from studies that were not conducted by or for the applicant and for which the applicant has not obtained a right of reference. Section 505(b)(2), if applicable to us under the FD&C Act, would allow an NDA we submit to the FDA to rely in part on data in the public domain or the FDA's prior conclusions regarding the safety and effectiveness of approved compounds, which could expedite the development program for our product candidate by potentially decreasing the amount of nonclinical and/or clinical data that we would need to generate in order to obtain FDA approval. If the FDA does not allow us to pursue the Section 505(b)(2) regulatory pathway as anticipated, we may need to conduct additional nonclinical studies and/or clinical trials, provide additional data and information, and meet additional standards for regulatory approval. If this were to occur, the time and financial resources required to obtain FDA approval for this product candidate, and complications and risks associated with this product candidate, would likely substantially increase. Moreover, inability to pursue the Section 505(b)(2) regulatory pathway could result in new competitive products reaching the market more quickly than our product candidate, which would likely materially adversely impact our competitive position and prospects. Even if we are allowed to pursue the Section 505(b)(2) regulatory pathway, we cannot assure you that our product candidate will receive the requisite approval for commercialization.

In addition, notwithstanding the approval of a number of products by the FDA under Section 505(b)(2) over the last few years, certain pharmaceutical companies and others have objected to the FDA's interpretation of Section 505(b)(2). If the FDA's interpretation of Section 505(b)(2) is successfully challenged, the FDA may change its 505(b)(2) policies and practices, which could delay or even prevent the FDA from approving any NDA that we submit under Section 505(b)(2). In addition, the pharmaceutical industry is highly competitive, and Section 505(b)(2) NDAs are subject to certain requirements designed to protect the patent rights of sponsors of previously approved drugs that are referenced in a Section 505(b)(2) NDA. These requirements may give rise to patent litigation and mandatory delays in approval of our NDAs for up to 30 months or longer depending on the outcome of any litigation. It is not uncommon for a manufacturer of an approved product to file a citizen petition with the FDA seeking to delay approval of, or impose additional approval requirements for, pending competing products. If successful, such petitions can significantly delay, or even prevent, the approval of the new product. Even if the FDA ultimately denies such a petition, the FDA may substantially delay approval while it considers and responds to the petition. In addition, even if we are able to utilize the Section 505(b)(2) regulatory pathway, there is no guarantee this would ultimately lead to streamlined product development or earlier approval.

Moreover, even if our product candidate is approved under Section 505(b)(2), the approval may be subject to limitations on the indicated uses for which the product may be marketed or to other conditions of approval, or may contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the product.

The misuse or off-label use of our product candidates may harm our reputation in the marketplace, result in injuries that lead to product liability suits or result in costly investigations, fines or sanctions by regulatory bodies if we are deemed to have engaged in the promotion of these uses, and any of these consequences could be costly to our business.

We are developing certain precision medicine product candidates, including pharmaceutical products and medical devices, which if authorized for marketing by the FDA or other regulatory authorities, will be authorized for use in specific indications and patient populations. We expect to train our marketing personnel and direct sales force not to promote our product candidates for uses outside of the FDA-approved or -cleared indications for use, which are sometimes referred to as "off-label uses." We cannot, however, prevent a physician from using our products off-label, when in the physician's independent professional medical judgment he or she deems it appropriate. There may be increased risk of injury to patients if physicians attempt to use our products off-label. Furthermore, the use of our products for indications other than those authorized for marketing by the FDA or any foreign regulatory body may not effectively treat such conditions, which could harm our reputation in the marketplace among physicians and patients.

If the FDA or any foreign regulatory body determines that our promotional materials or training constitute promotion of an off-label use, it could request that we modify our training or promotional materials or subject us to regulatory or enforcement actions, including the issuance or imposition of an untitled letter, a warning letter, injunction, seizure, civil fine, or criminal penalties. It is also possible that other federal, state or foreign enforcement authorities might take action under other regulatory authority, such as false claims laws, if they consider our business activities to constitute promotion of an off-label use, which could result in significant

penalties, including, but not limited to, criminal, civil, and administrative penalties, damages, fines, disgorgement, exclusion from participation in government healthcare programs and the curtailment of our operations.

In addition, physicians may misuse our products or use improper techniques if they are not adequately trained, potentially leading to injury and an increased risk of product liability. If our products are misused or used with improper technique, we may become subject to costly litigation by our customers or their patients. As described above, product liability claims could divert management's attention from our core business, be expensive to defend and result in sizeable damage awards against us that may not be covered by insurance.

Risks Related to Our Intellectual Property

Third-party claims of intellectual property infringement could result in litigation or other proceedings, which would be costly and time-consuming, and could limit our ability to commercialize our products under development.

Our success depends in part on our freedom-to-operate with respect to the patents or intellectual property rights of third parties. We operate in industries in which there have been substantial litigation and other proceedings regarding patents and other intellectual property rights. For example, we have identified a number of third-party patents that may be asserted against us with respect to certain of our future products, and have identified pending patent applications for which the ultimate claim scope and validity are uncertain. We believe that we do not infringe the relevant claims of these third-party patents and/or that the relevant claims of these patents are likely invalid or unenforceable. We may choose to challenge the validity of these patents, though the outcome of any challenge that we may initiate in the future is uncertain. We may also decide in the future to seek a license to those third-party patents, but we might not be able to do so on reasonable terms. Certain third parties, including our competitors or collaborators, have asserted and may in the future assert that we are employing their proprietary technology without authorization or that we are otherwise infringing their intellectual property rights. The risk of intellectual property proceedings may increase as the number of products and the level of competition in our industry segments grows. Defending against infringement claims is costly and may divert the attention of our management and technical personnel. If we are unsuccessful in defending against patent infringement claims, we could be required to stop developing or commercializing products, pay potentially substantial monetary damages, and/or obtain licenses from third parties, which we may be unable to do on acceptable terms, if at all, and which may require us to make substantial royalty payments. In addition, we could encounter delays in product introductions while we attempt to develop alternative non-infringing products. Any of these or other adverse outcomes could have a material and adverse effect on our business, operating results, and financial condition. See Part I, Item 3. "Legal Proceedings—Ravgen Lawsuit" in our Annual Report for more information regarding a patent infringement suit filed by Ravgen, Inc. related to our laboratory developed test business, which is no longer in operation.

As we move into new markets and develop enhancements to and new applications for our product candidates, competitors have asserted and may in the future assert their patents and other proprietary rights against us as a means of blocking or slowing our entry into such markets or our sales of such new or enhanced products or as a means to extract substantial license and royalty payments from us. Our competitors and others may have significantly stronger, larger, and/or more mature patent portfolios than we have, and additionally, our competitors may be better resourced and highly motivated to protect large, well-established markets that could be disrupted by our product candidates. In addition, future litigation may involve patent holding companies or other patent owners or licensees who have no relevant product revenues and against whom our own patents may provide little or no deterrence or protection.

In addition, our agreements with some of our collaborators, suppliers, and other entities with whom we do business require us to defend or indemnify these parties to the extent they become involved in infringement claims, including the types of claims described above. We could also voluntarily agree to defend or indemnify third parties if we determine it to be in the best interests of our business relationships. If we are required or agree to defend or indemnify third parties in connection with any infringement claims, we could incur significant costs and expenses that could adversely affect our business, operating results, and financial condition.

Because the industries in which we operate are particularly litigious, we are susceptible to intellectual property suits that could cause us to incur substantial costs or pay substantial damages or prohibit us from selling our products under development or conducting our other business.

There is a substantial amount of litigation over patent and other intellectual property rights in the industries in which we operate, including but not limited to the biotechnology, life sciences, pharmaceuticals, and medical device industries. Whether a product infringes a patent involves complex legal and factual issues that may be open to different interpretations. Searches typically performed to identify potentially infringed patents of third parties are often not conclusive and because patent applications can take many years to issue, there may be applications now pending, which may later result in issued patents which our future products may infringe. In addition, our competitors or other parties may assert that our product candidates and the methods they employ may be covered by patents held by them. If any of our products infringes a valid patent, we could be prevented from manufacturing or selling it unless we can obtain a license or redesign the product to avoid infringement. A license may not always be available or may require us to pay substantial royalties. Infringement and other intellectual property claims, with or without merit, can be expensive and time-consuming to litigate and could divert our management's attention from operating our business.

Any inability to effectively protect our proprietary technologies could harm our competitive position.

Our success and ability to compete depend to a large extent on our ability to develop proprietary products and technologies and to maintain adequate protection of our intellectual property in the United States and elsewhere. The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and many companies have encountered significant challenges in establishing and enforcing their proprietary rights outside of the United States. These challenges can be caused by the absence of rules and methods for the establishment and enforcement of intellectual property rights in certain jurisdictions outside of the United States. In addition, the proprietary positions of companies in the industries in which we operate generally are uncertain and involve complex legal and factual questions. This is particularly true in the life sciences area where the U.S. Supreme Court has issued a series of decisions setting forth limits on the patentability of natural phenomena, natural laws, abstract ideas and their applications (see, *Mayo Collaborative v. Prometheus Laboratories* (2012), *Association for Molecular Pathology v. Myriad Genetics* (2013), and *Alice Corporation v. CLS Bank* (2014), which has made it difficult to obtain certain patents and to assess the validity of previously issued patents). This uncertainty may materially affect our ability to defend or obtain patents or to address the patents and patent applications owned or controlled by our collaborators and licensors.

We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. Any finding that our patents or patent applications are invalid or unenforceable could harm our ability to prevent others from practicing the related technology. We cannot be certain that we were the first to invent the inventions covered by pending patent applications or that we were the first to file such applications, and a finding that others have claims of inventorship or ownership rights to our patents and applications could require us to obtain certain rights to practice related technologies, which may not be available on favorable terms, if at all. There may be times when we choose to retain advisors with academic employers who limit their employees' rights to enter into agreements which provide the kind of confidentiality and assignment provisions congruent with our consulting agreements. We may decide that obtaining the services of these advisors is worth any potential risk, and this may harm our ability to obtain and enforce our intellectual property rights. In addition, our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing similar or alternative competing products, or design around our patented technologies, and may therefore fail to provide us with any competitive advantage. Furthermore, as our issued patents expire, we may lose some competitive advantage as others develop competing products that would have been covered by the expired patents, and, as a result, may adversely affect our business, operating results, and financial condition.

We may be required to file or defend infringement lawsuits and other contentious proceedings, such as inter partes reviews, reexaminations, oppositions, and declaratory judgment actions, to protect our interests, which can be expensive and time-consuming. We cannot assure you that we would prevail over an infringing third party, and we may become subject to counterclaims by such third parties. Our patents may be declared invalid or unenforceable, or narrowed in scope, as a result of such litigation or other proceedings. Some third-party infringers may have substantially greater resources than us and may be able to sustain the costs of complex infringement litigation more effectively than we can. Even if we have valid and enforceable patents, competitors may still choose to offer products that infringe our patents.

Further, preliminary injunctions that bar future infringement by the competitor are not often granted; therefore, remedies for infringement are not often immediately available. Even if we prevail in an infringement action, we cannot assure you that we would be fully or partially financially compensated for any harm to our business. We may be forced to enter into a license or other agreement with the third parties on terms less profitable or otherwise less commercially acceptable to us than those negotiated between a willing licensee and a willing licensor. Any inability to stop third-party infringement could result in the future in a loss in market share of our products under development, or lead to a delay, reduction, and/or inhibition of our development, manufacture, or sale of some of our products. A product produced and sold by a third-party infringer may not meet our or other regulatory standards or may not be safe for use, which could cause irreparable harm to the reputation of our products, which in turn could result in substantial loss in our market share and profits.

There is also the risk that others, including our competitors in the targeted and systemic therapeutics fields, may independently develop similar or alternative technologies, ingestible devices, or design around our patented or patent pending technologies, and our competitors or others may have filed, and may in the future file, conflicting patent claims covering technology similar or identical to ours. The costs associated with challenging conflicting patent claims could be substantial, and it is possible that our efforts would be unsuccessful and may result in a loss of our patent position and the issuance or validation of the competing claims. Should such competing claims cover our technology, we could be required to obtain rights to those claims at substantial cost.

Any of these factors could adversely affect our ability to obtain commercially relevant or competitively advantageous patent protection for our products under development.

“Submarine” patents may be granted to our competitors, which may significantly alter our launch timing expectations, reduce our projected market size, cause us to modify our product or process or block us from the market altogether.

The term “submarine” patent is used to denote a patent issuing from an application that was not published, publicly known or available prior to its grant. Submarine patents add substantial risk and uncertainty to our business. Submarine patents may issue to our competitors covering our product candidates and thereby cause significant market entry delay, defeat our ability to market our product candidates or cause us to abandon development and/or commercialization of a product candidate.

The issuance of one or more submarine patents may harm our business by causing substantial delays in our ability to introduce a product candidate or other product into the U.S. market.

If we are not able to adequately protect our trade secrets, know-how, and other proprietary information, the value of our technology and products under development could be significantly diminished.

We rely on trade secret protection and proprietary know-how protection for our confidential and proprietary information, and we have taken security measures to protect this information. These measures, however, may not provide adequate protection for our trade secrets, know-how, or other proprietary information. For example, although we have a policy of requiring our consultants, advisors and collaborators to enter into confidentiality agreements and our employees to enter into invention, non-disclosure and, where lawful, noncompete agreements, we cannot assure you that such agreements will provide for a meaningful protection of our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure of information, including as a result of breaches of our physical or electronic security systems, or as a result of our employees failing to abide by their confidentiality obligations during or upon termination of their employment with us. Any action to enforce our rights is likely to be time-consuming and expensive, and may ultimately be unsuccessful, or may result in a remedy that is not commercially valuable. These risks are heightened in countries where laws or law enforcement practices may not protect proprietary rights as fully as in the United States. Any unauthorized use or disclosure of, or access to, our trade secrets, know-how or other proprietary information, whether accidentally or through willful misconduct, could have a material and adverse effect on our programs, our business strategy, and on our ability to compete effectively.

If our trademarks and trade names are not adequately protected, we may not be able to build name recognition in our markets of interest, and our business may be adversely affected.

Failure to maintain our trademark registrations, or to obtain new trademark registrations in the future, could limit our ability to protect our trademarks and impede our marketing efforts in the countries in which we operate. We may not be able to protect our rights to trademarks and trade names which we may need to build name recognition with potential partners or customers in our markets of interest. As a means to enforce our trademark rights and prevent infringement, we may be required to file trademark claims against third parties or initiate trademark opposition proceedings. This can be expensive, particularly for a company of our size, and time-consuming, and we may not be successful. Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented, declared generic or determined to be infringing on other marks.

Our pending trademark applications in the United States and in other foreign jurisdictions where we may file may not be allowed or may subsequently be opposed. Even if these applications result in registration of trademarks, third parties may challenge our use or registration of these trademarks in the future. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected.

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

We employ individuals who were previously employed at other companies in the industries in which we operate, including biotechnology or diagnostic companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or willfully used or disclosed confidential information of our employees’ former employers or other third parties. We may also be subject to claims that our employees’ former employers or other third parties have an ownership interest in our patents. Litigation may be necessary to defend against these claims, and if we are unsuccessful, we could be required to pay substantial damages and could lose rights to important intellectual property.

Even if we are successful, litigation could result in substantial costs to us and could divert the time and attention of our management and other employees.

Risks Related to Ownership of Our Common Stock

The market price of our common stock has fluctuated in the past, and is likely to continue to be volatile, which could subject us to litigation.

The market price of our common stock has fluctuated and is likely to be subject to further wide fluctuations in response to numerous factors, many of which are beyond our control, such as those in this “Risk Factors” section and others including:

- actual or anticipated variations in our and our competitors’ operating results;
- announcements by us or our competitors of new products, product development results, significant acquisitions or divestitures, strategic and commercial partnerships and relationships, joint ventures, collaborations or capital commitments;
- issuance of new securities analysts’ reports or changed recommendations for our stock;
- periodic fluctuations in our revenue;
- actual or anticipated changes in regulatory oversight of our products under development;
- developments or disputes concerning our intellectual property or other proprietary rights or alleged infringement of third party’s rights by us or our products under development;
- commencement of, or our involvement in, litigation or other proceedings;
- announcement or expectation of additional debt or equity financing efforts;
- sales of our common stock by us, our insiders or our other stockholders;
- any major change in our management; and
- general economic conditions and slow or negative growth of our markets, including slow or negative growth in the biotechnology industry generally.

In addition, if the stock market experiences uneven investor confidence, the market price of our common stock could decline for reasons unrelated to our business, operating results, or financial condition. The market price of our common stock might also decline in reaction to events that affect other companies within, or outside, our industry even if these events do not directly affect us. Some companies that have experienced volatility in the trading price of their stock have been the subject of securities class action litigation. If we are the subject of such litigation, it could result in substantial costs and a diversion of our management’s attention and resources.

We may fail to qualify for continued listing on the Nasdaq Global Market, which could make it more difficult for our stockholders to sell their shares.

We are required to satisfy the continued listing requirements of the Nasdaq Global Market (“Nasdaq”) to maintain such listing, including, among other things, the maintenance of a minimum closing bid price of \$1.00 per share. On June 6, 2022, we received a notice from Nasdaq that we were not in compliance with the minimum bid price requirements set forth in Nasdaq Listing Rule 5450(a)(1) for continued listing on Nasdaq. Nasdaq Listing Rule 5450(a)(1) requires listed securities maintain a minimum closing bid price of \$1.00 per share, and Nasdaq Listing Rule 5810(c)(3)(A) provides that a failure to meet the minimum closing bid price requirement exists if the deficiency continues for a period of 30 consecutive business days. The notification of noncompliance had no immediate effect on the listing or trading of our common stock on Nasdaq and we have 180 calendar days from the date of notice to achieve compliance with the minimum bid price requirement. To regain compliance, the closing bid price of the Company’s common stock must be at least \$1.00 per share for a minimum of 10 consecutive business days at any time prior to the expiration of the 180 calendar day period. If the Company does not achieve compliance with the minimum closing bid price requirement during the initial 180 calendar day period, the Company expects to be eligible for an additional 180 calendar day compliance period. The Company intends to actively monitor the closing bid price of its common stock and is committed to regaining compliance with the minimum closing bid price requirement prior to the expiration of all applicable compliance periods.

There can be no assurance that we will be able to regain compliance with the minimum bid price requirement. In the event that we do not regain compliance with the Nasdaq Listing Rules prior to the expiration of the extension period, we expect to receive written notification that our common stock is subject to delisting. If our common stock is delisted by Nasdaq, we could face significant material adverse consequences, including:

- a limited availability of market quotations for our common stock;
- reduced liquidity with respect to our common stock;

- a determination that our shares are “penny stock,” which will require brokers trading in our shares to adhere to more stringent shares, and which may limit demand for our common stock among certain investors;
- a limited amount of news and analyst coverage for our company; and
- a decreased ability to issue additional securities or obtain additional financing in the future.

Our common stock may become the target of “short squeezes.”

In the recent past, the securities of several companies have increasingly experienced significant and extreme volatility in stock price due to short sellers of shares of their stock and buy-and-hold decisions of other investors, resulting in what is sometimes described as a “short squeeze.” Short squeezes have caused extreme volatility in the stock prices of those companies and in the market and have led to the price per share of some of those companies to trade at a significantly inflated rate that is disconnected from the underlying value of the company. Sharp rises in a company’s stock price may force traders in a short position to buy the stock to avoid even greater losses. Investors who purchase shares in those companies at an inflated rate face the risk of losing a significant portion of their original investment as the price per share has declined steadily as interest in those stocks have abated. Market activity suggests that we have been the target of a short squeeze, and this could occur again at any time, and stockholders may lose a significant portion or all of their investment if they purchase our shares at a rate that is significantly disconnected from our underlying value.

The issuance of shares of our common stock upon conversion of the Convertible Notes and exercise of warrants will dilute the ownership interests of our stockholders and could depress the trading price of our common stock.

We must settle conversions of our outstanding Convertible Notes and exercise of our outstanding warrants in shares of our common stock, together with cash in lieu of issuing any fractional share in the case of the Convertible Notes. The issuance of shares of our common stock upon conversion of the Convertible Notes or exercise of the warrants will dilute the ownership interests of our stockholders, which could depress the trading price of our common stock. In addition, the market’s expectation that conversions or exercises may occur could depress the trading price of our common stock even in the absence of actual conversions or exercises. Moreover, the expectation of conversions or exercises could encourage the short selling of our common stock, which could place further downward pressure on the trading price of our common stock.

Hedging activity by investors in the Convertible Notes and warrants could depress the trading price of our common stock.

We expect that many investors in our outstanding Convertible Notes and warrants will seek to employ an arbitrage strategy. Under this strategy, investors typically short sell a certain number of shares of our common stock and adjust their short position over time while they continue to hold the Convertible Notes or warrants. Investors may also implement this type of strategy by entering into swaps on our common stock in lieu of, or in addition to, short selling shares of our common stock. This market activity, or the market’s perception that it will occur, could depress the trading price of our common stock.

Provisions in the Indenture governing our outstanding Convertible Notes could delay or prevent an otherwise beneficial takeover of us.

Certain provisions in our Convertible Notes and the Indenture governing the Convertible Notes could make a third party attempt to acquire us more difficult or expensive. For example, if a takeover constitutes a “fundamental change” (which is defined in the Indenture to include certain change-of-control events and the delisting of our common stock), then noteholders will have the right to require us to repurchase their Convertible Notes for cash. In addition, if a takeover constitutes a “make-whole fundamental change” (which is defined in the Indenture to include, among other events, fundamental changes and certain additional business combination transactions), then we may be required to temporarily increase the conversion rate for the Convertible Notes. In either case, and in other cases, our obligations under the Convertible Notes and the Indenture could increase the cost of acquiring us or otherwise discourage a third party from acquiring us or removing incumbent management, including in a transaction that holders of our common stock may view as favorable.

We may be unable to raise the funds necessary to repurchase the Convertible Notes for cash following a fundamental change or to pay any cash amounts due upon conversion, and our other indebtedness may limit our ability to repurchase our outstanding Convertible Notes.

Noteholders may require us to repurchase their Convertible Notes following a “fundamental change” (which is defined in the Indenture governing the Convertible Notes to include certain change-of-control events and the delisting of our common stock) at a cash repurchase price generally equal to the principal amount of the Convertible Notes to be repurchased, plus accrued and unpaid interest, if any. In addition, noteholders that convert their Convertible Notes before December 1, 2022 will, in certain circumstances, be entitled to an additional cash payment representing the present value of any remaining interest payments on the Convertible Notes through December 1, 2022. Furthermore, additional cash amounts may be due upon conversion in certain circumstances if the number of shares that we deliver upon conversion of the Convertible Notes is limited by the listing standards of Nasdaq. We may not have enough available cash or be able to obtain financing at the time we are required to repurchase the Convertible Notes or pay these cash amounts upon their conversion. In addition, applicable law, regulatory authorities and the agreements governing our other

indebtedness may restrict our ability to repurchase the Convertible Notes or pay these cash amounts upon their conversion. Our failure to repurchase Convertible Notes when required or pay these cash amounts upon their conversion will constitute a default under the Indenture governing the Convertible Notes. A default under the Indenture or the fundamental change itself could also lead to a default under agreements governing our other indebtedness, which may result in that other indebtedness becoming immediately payable in full. We may not have sufficient funds to satisfy all amounts due under the other indebtedness and the Convertible Notes.

The accounting method for the Convertible Notes could adversely affect our reported financial results.

The accounting method for reflecting the underlying shares of our common stock in our reported diluted earnings per share may adversely affect our reported earnings and financial condition. We expect that, under applicable accounting principles, the shares underlying our Convertible Notes will be reflected in our diluted earnings per share using the “if-converted” method. Under that method, diluted earnings per share would generally be calculated assuming that all the Convertible Notes were converted into shares of common stock at the beginning of the reporting period, unless the result would be anti-dilutive. The application of the if-converted method may reduce our reported diluted earnings per share.

Furthermore, the conversion features in our Convertible Notes are accounted for as a free-standing embedded derivative bifurcated from the principal balance of the Convertible Notes. The embedded derivative liability is remeasured at fair value each reporting period with positive or negative changes in fair value recorded in our consolidated statement of operations, which may adversely affect our reported earnings and financial condition and result in significant fluctuations in our future financial performance.

General Risk Factors

Insiders have substantial control over us and will be able to influence corporate matters.

As of June 30, 2022, our current directors and executive officers, together with their affiliates, have significant ownership of our outstanding common stock. As a result, these stockholders, if they act, will be able to exercise significant influence over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, such as a merger or other sale of our company or its assets. They may have interests that differ from yours and may vote in a way with which you disagree and that may be adverse to your interests. This concentration of ownership could limit stockholders’ ability to influence corporate matters and may have the effect of delaying, deterring or preventing a third party from acquiring control over us, depriving our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company, and could negatively impact the value and market price of our common stock.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause the stock price of our common stock to decline.

In the future, we may sell common stock, convertible securities, or other equity securities in one or more transactions at prices and in a manner we determine from time to time. We also expect to issue common stock to employees, directors, and consultants pursuant to our equity incentive plans. If we sell common stock, convertible securities, or other equity securities in subsequent transactions, or common stock is issued pursuant to equity incentive plans, investors may be materially diluted. New investors in such subsequent transactions could gain rights, preferences, and privileges senior to those of holders of our common stock.

Sales of a substantial number of shares of our common stock in the public market by our existing stockholders could cause the price of our common stock to decline.

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock.

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

We are an emerging growth company. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to avail ourselves of this exemption and, as a result, will not be subject to the same implementation timing for new or revised accounting standards as are required of other public companies that are not emerging growth companies, which may make comparison of our consolidated financial information to those of other public companies more difficult.

For as long as we continue to be an emerging growth company, however, we intend to take advantage of certain other exemptions from various reporting requirements that are applicable to other public companies including, but not limited to, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute

payments not previously approved. We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile and experience decreases.

We will remain an emerging growth company until the earliest of (a) the end of the fiscal year (i) following the fifth anniversary of the closing of our IPO, (ii) in which the market value of our common stock that is held by non-affiliates exceeds \$700 million and (iii) in which we have total annual gross revenues of \$1.07 billion or more during such fiscal year, and (b) the date on which we issue more than \$1 billion in non-convertible debt in a three-year period.

We have previously identified material weaknesses in our internal control over financial reporting. If additional material weaknesses in our internal control over financial reporting are discovered or occur in the future, our consolidated financial statements may contain material misstatements and we could be required to restate our financial results, which could adversely affect our stock price and result in an inability to maintain compliance with applicable stock exchange listing requirements.

We previously concluded that there were matters that constituted material weaknesses in our internal control over financial reporting that have since been remediated. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected and corrected on a timely basis. The material weaknesses related to a lack of (i) controls designed to reconcile tests performed and recognized as revenue to billed tests and (ii) appropriately designed or effectively operating controls over the proper recording of accounts payable and accrued liabilities.

If additional material weaknesses in our internal control over financial reporting are discovered or occur in the future, our consolidated financial statements may contain material misstatements and we could be required to restate our financial results. If we are unable to successfully remediate any material weaknesses in our internal controls or if we are unable to produce accurate and timely financial statements, our stock price may be adversely affected, and we may be unable to maintain compliance with applicable stock exchange listing requirements.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock depends in part on the research and reports that securities or industry analysts publish about us or our business. If few securities analysts provide coverage of us, or if industry analysts cease coverage of us, the trading price and volume for our common stock could be adversely affected. If one or more of the analysts who cover us downgrade our common stock or publish inaccurate or unfavorable research about our business, our common stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our common stock could decrease, which might cause our common stock price and trading volume to decline.

Provisions in our certificate of incorporation and bylaws and Delaware law might discourage, delay or prevent a change in control of our company or changes in our management and, therefore, depress the market price of our common stock.

Our eighth amended and restated certificate of incorporation, as amended, and our second amended and restated bylaws contain provisions that could depress the market price of our common stock by acting to discourage, delay, or prevent a change in control of our company or changes in our management that the stockholders of our company may deem advantageous. These provisions, among other things:

- authorize the issuance of “blank check” preferred stock that our board of directors could use to implement a stockholder rights plan;
- prohibit stockholder action by written consent, which requires stockholder actions to be taken at a meeting of our stockholders, except for so long as specified stockholders hold in excess of 50% of our outstanding common stock;
- prohibit stockholders from calling special meetings of stockholders;
- establish advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon by stockholders at annual stockholder meetings;
- provide the board of directors with sole authorization to establish the number of directors and fill director vacancies; and
- provide that the board of directors is expressly authorized to make, alter, or repeal our second amended and restated bylaws.

In addition, Section 203 of the Delaware General Corporation Law may discourage, delay, or prevent a change in control of our company. Section 203 imposes certain restrictions on mergers, business combinations and other transactions between us and holders of 15% or more of our common stock.

Our certificate of incorporation provides that the Court of Chancery of the State of Delaware will be the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our eighth amended and restated certificate of incorporation, as amended to date, provides that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum, to the fullest extent permitted by law, for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a breach of a fiduciary duty owed by any director, officer or other employee to us or our stockholders, (3) any action asserting a claim against us or any director, officer or other employee arising pursuant to the Delaware General Corporation Law, (4) any action to interpret, apply, enforce or determine the validity of our eighth amended and restated certificate of incorporation, as amended to date, or our second amended and restated bylaws, or (5) any other action asserting a claim that is governed by the internal affairs doctrine, shall be the Court of Chancery of the State of Delaware (or another state court or the federal court located within the State of Delaware if the Court of Chancery does not have or declines to accept jurisdiction), in all cases subject to the court's having jurisdiction over indispensable parties named as defendants. In addition, our eighth amended and restated certificate of incorporation, as amended to date, provides that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act but that the forum selection provision will not apply to claims brought to enforce a duty or liability created by the Exchange Act. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers. Alternatively, if a court were to find the choice of forum provision contained in our eighth amended and restated certificate of incorporation, as amended to date, and our second amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, financial condition, and operating results. For example, under the Securities Act, federal courts have concurrent jurisdiction over all suits brought to enforce any duty or liability created by the Securities Act, and investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Any person or entity purchasing or otherwise acquiring any interest in our shares of capital stock shall be deemed to have notice of and consented to this exclusive forum provision, but will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

Item 6. Exhibits.

EXHIBIT NO.	DESCRIPTION
31.1*	Certification of principal executive officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
31.2*	Certification of principal financial officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
32.1†	Certification of principal executive officer and principal financial officer pursuant to 18 U.S.C. Section 1350 and Rule 13a-14(B) promulgated under the Securities Exchange Act of 1934
101.INS	Inline XBRL Instance 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 (embedded within the Inline XBRL document)
*	Filed herewith.
†	Furnished herewith and not deemed to be “filed” for purposes of Section 18 of the Exchange Act, and shall not be deemed to be incorporated by reference into any filing under the Securities Act.

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.

Date: August 15, 2022

BIORA THERAPEUTICS, INC.

By: /s/ Aditya P. Mohanty

Aditya P. Mohanty

Chief Executive Officer

(principal executive officer)

By: /s/ Eric d'Esparbes

Eric d'Esparbes

Chief Financial Officer

(principal financial and accounting officer)

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Aditya P. Mohanty, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Biora Therapeutics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 15, 2022

By: _____ /s/ Aditya P. Mohanty
Aditya P. Mohanty, Chief Executive Officer
(principal executive officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of Biora Therapeutics, Inc. (the “Company”) for the period ended June 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), each of the undersigned officers of the Company hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 15, 2022

By: _____
/s/ Aditya P. Mohanty
Aditya P. Mohanty, Chief Executive Officer
(principal executive officer)

By: _____
/s/ Eric d’Esparbes
Eric d’Esparbes, Chief Financial Officer
(principal financial and accounting officer)

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. §1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Note: A signed original of this written statement required by §906 has been provided to Biora Therapeutics, Inc. and will be retained by Biora Therapeutics, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.
