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

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**FORM 10-Q**

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(Mark One)

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

For the quarterly period ended March 31, 2023

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: 001-37507

**IMMUNITYBIO, INC.**

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of  
incorporation or organization)

3530 John Hopkins Court  
San Diego, California

(Address of principal executive offices)

43-1979754

(I.R.S. Employer  
Identification No.)

92121

(Zip Code)

Registrant's telephone number, including area code: (844) 696-5235

**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 \$0.0001 per share	IBRX	The Nasdaq Global Select Market

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

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

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

Large accelerated filer	<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 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

The number of shares of the Registrant's common stock outstanding as of May 5, 2023 was 435,984,529 (excluding 163,800 shares held by a majority owned subsidiary of ours which are treated as treasury shares for accounting purposes).

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**PART I—FINANCIAL INFORMATION**
**ITEM 1. FINANCIAL STATEMENTS.**

**ImmunityBio, Inc. and Subsidiaries**  
**Condensed Consolidated Balance Sheets**  
(in thousands, except share and per share amounts)

	March 31, 2023 (Unaudited)	December 31, 2022
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 88,481	\$ 104,641
Marketable securities	2,787	2,543
Due from related parties	1,464	1,890
Prepaid expenses and other current assets (including amounts with related parties)	20,754	31,503
Total current assets	113,486	140,577
Marketable securities, noncurrent	820	840
Property, plant and equipment, net	154,165	143,659
Intangible assets, net	19,502	20,003
Convertible note receivable	6,691	6,629
Operating lease right-of-use assets, net (including amounts with related parties)	44,191	45,788
Other assets (including amounts with related parties)	4,545	4,860
Total assets	\$ 343,400	\$ 362,356
<b>LIABILITIES AND STOCKHOLDERS' DEFICIT</b>		
Current liabilities:		
Accounts payable	\$ 33,573	\$ 21,016
Accrued expenses and other liabilities	54,118	41,825
Related-party promissory notes, net of discounts and deferred issuance costs (Note 9)	441,628	431,901
Related-party convertible note at fair value (Note 5 and Note 9)	29,850	—
Due to related parties	2,932	3,469
Operating lease liabilities (including amounts with related parties)	2,844	2,650
Total current liabilities	564,945	500,861
Related-party convertible notes and accrued interest, net of discount (Note 9)	245,640	241,271
Operating lease liabilities, less current portion (including amounts with related parties)	46,289	47,951
Warrant liabilities	17,780	21,636
Other liabilities	462	457
Total liabilities	875,116	812,176
Commitments and contingencies (Note 7)		
Stockholders' deficit:		
Common stock, \$0.0001 par value; 900,000,000 shares authorized as of March 31, 2023 and December 31, 2022, respectively; 435,923,104 and 421,569,115 shares issued and outstanding as of March 31, 2023 and December 31, 2022, respectively; excluding treasury stock, 163,800 shares outstanding as of March 31, 2023 and December 31, 2022, respectively	43	42
Additional paid-in capital	1,965,838	1,930,936
Accumulated deficit	(2,494,831)	(2,378,488)
Accumulated other comprehensive (loss) income	(33)	183
Total ImmunityBio stockholders' deficit	(528,983)	(447,327)
Noncontrolling interests	(2,733)	(2,493)
Total stockholders' deficit	(531,716)	(449,820)
Total liabilities and stockholders' deficit	\$ 343,400	\$ 362,356

The accompanying notes are an integral part of these condensed consolidated financial statements.

**ImmunityBio, Inc. and Subsidiaries**  
**Condensed Consolidated Statements of Operations**  
(in thousands, except share and per share amounts)  
(Unaudited)

	Three Months Ended March 31,	
	2023	2022
<b>Revenue</b>	\$ 360	\$ 14
Operating expenses:		
Research and development (including amounts with related parties)	79,264	55,378
Selling, general and administrative (including amounts with related parties)	32,676	40,608
Total operating expenses	111,940	95,986
<b>Loss from operations</b>	(111,580)	(95,972)
Other income (expense), net:		
Interest and investment income, net	673	1,666
Interest expense (including amounts with related parties)	(29,816)	(8,491)
Loss on equity method investment	(2,337)	(197)
Change in fair value of warrant liabilities	27,554	—
Other expense, net (including amounts with related parties)	(1,077)	(4)
Total other expense, net	(5,003)	(7,026)
<b>Loss before income taxes and noncontrolling interests</b>	(116,583)	(102,998)
Income tax expense	—	—
<b>Net loss</b>	(116,583)	(102,998)
Net loss attributable to noncontrolling interests, net of tax	(240)	(172)
Net loss attributable to ImmunityBio common stockholders	\$ (116,343)	\$ (102,826)
Net loss per ImmunityBio common share – basic and diluted	\$ (0.27)	\$ (0.26)
Weighted-average number of common shares used in computing net loss per share – basic and diluted	428,381,485	397,882,441

The accompanying notes are an integral part of these condensed consolidated financial statements.

**ImmunityBio, Inc. and Subsidiaries**  
**Condensed Consolidated Statements of Comprehensive Loss**  
**(in thousands)**  
**(Unaudited)**

	Three Months Ended March 31,	
	2023	2022
Net loss	\$ (116,583)	\$ (102,998)
Other comprehensive income (loss), net of income taxes:		
Net unrealized gains (losses) on available-for-sale securities	4	(310)
Reclassification of net realized gains on available-for-sale securities included in net loss	6	—
Foreign currency translation adjustments	(226)	(61)
Total other comprehensive loss	(216)	(371)
Comprehensive loss	(116,799)	(103,369)
Less: Comprehensive loss attributable to noncontrolling interests	(240)	(172)
Comprehensive loss attributable to ImmunityBio common stockholders	\$ (116,559)	\$ (103,197)

The accompanying notes are an integral part of these condensed consolidated financial statements.

**ImmunityBio, Inc. and Subsidiaries**  
**Condensed Consolidated Statements of Stockholders' Deficit**  
(in thousands, except share amounts)  
(Unaudited)

	Three Months Ended March 31, 2023								
	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total ImmunityBio Stockholders' Deficit	Noncontrolling Interests	Total Stockholders' Deficit	
	Shares	Amount							
Balance as of December 31, 2022	421,569,115	\$ 42	\$1,930,936	\$(2,378,488)	\$ 183	\$ (447,327)	\$ (2,493)	\$ (449,820)	
Issuance of shares in a registered direct offering, net of discount and offering costs of \$2,046 and value ascribed to associated warrants ( <a href="#">Note 11</a> )	14,072,615	1	24,255	—	—	24,256	—	24,256	
Stock-based compensation expense	—	—	10,878	—	—	10,878	—	10,878	
Exercise of stock options	81,037	—	126	—	—	126	—	126	
Vesting of restricted stock units (RSUs)	313,975	—	—	—	—	—	—	—	
Net share settlement for RSUs vesting	(113,638)	—	(357)	—	—	(357)	—	(357)	
Other comprehensive (loss) income, net of tax	—	—	—	—	(216)	(216)	—	(216)	
Net loss	—	—	—	(116,343)	—	(116,343)	(240)	(116,583)	
Balance as of March 31, 2023	435,923,104	\$ 43	\$1,965,838	\$(2,494,831)	\$ (33)	\$ (528,983)	\$ (2,733)	\$ (531,716)	

The accompanying notes are an integral part of these condensed consolidated financial statements.

**ImmunityBio, Inc. and Subsidiaries**  
**Condensed Consolidated Statements of Stockholders' Deficit**  
(in thousands, except share amounts)  
(Unaudited)

	Three Months Ended March 31, 2022							
	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total ImmunityBio Stockholders' Deficit	Noncontrolling Interests	Total Stockholders' Deficit
	Shares	Amount						
Balance as of December 31, 2021	397,830,044	\$ 40	\$1,719,704	\$(1,961,921)	\$ 4	\$ (242,173)	\$ (1,740)	\$ (243,913)
Stock-based compensation expense	—	—	10,024	—	—	10,024	—	10,024
Exercise of stock options	14,767	—	74	—	—	74	—	74
Vesting of RSUs	177,783	—	—	—	—	—	—	—
Net share settlement for RSUs vesting	(65,832)	—	(372)	—	—	(372)	—	(372)
Other comprehensive (loss) income, net of tax	—	—	—	—	(371)	(371)	—	(371)
Net loss	—	—	—	(102,826)	—	(102,826)	(172)	(102,998)
Balance as of March 31, 2022	397,956,762	\$ 40	\$1,729,430	\$(2,064,747)	\$ (367)	\$ (335,644)	\$ (1,912)	\$ (337,556)

The accompanying notes are an integral part of these condensed consolidated financial statements.

**ImmunityBio, Inc. and Subsidiaries**  
**Condensed Consolidated Statements of Cash Flows**  
(in thousands)  
(Unaudited)

	Three Months Ended March 31,	
	2023	2022
<b>Operating activities:</b>		
Net loss	\$ (116,583)	\$ (102,998)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	10,878	10,024
Change in fair value of warrant liabilities	(27,554)	—
Transaction costs allocated to warrant liabilities	984	—
Non-cash interest items, net (including amounts with related parties)	2,505	3,028
Amortization of related-party notes discounts	11,536	370
Depreciation and amortization	4,681	4,090
Non-cash lease expense related to operating lease right-of-use assets	1,597	1,318
Unrealized (gains) on equity securities	(135)	(1,419)
Other	111	1,045
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	9,689	(218)
Other assets	295	101
Accounts payable	668	795
Accrued expenses and other liabilities	18,590	10,891
Related parties	(61)	(1,618)
Operating lease liabilities	(1,511)	(339)
Net cash used in operating activities	(84,310)	(74,930)
<b>Investing activities:</b>		
Purchases of property, plant and equipment	(8,428)	(27,347)
Purchase of intangible assets	—	(21,229)
Purchases of marketable debt securities, available-for-sale	(158)	(34,082)
Maturities of marketable debt securities, available for sale	—	14,345
Proceeds from sales of marketable debt and equity securities	102	—
Investment in joint venture – an equity method investment	—	(1,000)
Net cash used in investing activities	(8,484)	(69,313)
<b>Financing activities:</b>		
Proceeds from equity offerings, net of discounts and issuance costs	47,288	—
Proceeds from issuance of related-party convertible promissory notes, net of issuance costs paid	29,850	—
Proceeds from exercises of stock options	126	74
Net share settlement for RSUs vesting	(357)	(372)
Principal payments of finance leases	(19)	—
Net cash provided by (used in) financing activities	76,888	(298)
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	(254)	(175)
Net change in cash, cash equivalents, and restricted cash	(16,160)	(144,716)
Cash, cash equivalents, and restricted cash, beginning of period	104,965	181,280
Cash, cash equivalents, and restricted cash, end of period	\$ 88,805	\$ 36,564

The accompanying notes are an integral part of these condensed consolidated financial statements.



**ImmunityBio, Inc. and Subsidiaries**  
**Condensed Consolidated Statements of Cash Flows (Continued)**  
**(in thousands)**  
**(Unaudited)**

	Three Months Ended March 31,	
	2023	2022
<b>Reconciliation of cash, cash equivalents, and restricted cash, end of period:</b>		
Cash and cash equivalents	\$ 88,481	\$ 36,385
Restricted cash	324	179
Cash, cash equivalents, and restricted cash, end of period	<u>\$ 88,805</u>	<u>\$ 36,564</u>
<b>Supplemental disclosure of cash flow information:</b>		
Cash paid during the period for:		
Interest	\$ 15,515	\$ 5,036
Income taxes	—	—
<b>Supplemental disclosure of non-cash activities:</b>		
Initial measurement of warrants issued in connection with the registered direct offering accounted for as liabilities	\$ 23,698	\$ —
Property and equipment purchases included in accounts payable, accrued expenses and due to related parties	19,033	1,061
Unpaid offering costs included in accounts payable and accrued expenses	318	—
Unrealized gains (losses) on marketable debt securities, net	10	(310)
Right-of-use assets obtained in exchange for operating lease liabilities	—	911

The accompanying notes are an integral part of these condensed consolidated financial statements.

**ImmunityBio, Inc. and Subsidiaries**  
**Notes to Unaudited Condensed Consolidated Financial Statements**

**1. Description of Business**

In these notes to unaudited condensed consolidated financial statements, the terms “ImmunityBio,” “the company,” “we,” “us,” and “our” refer to ImmunityBio, Inc. and its subsidiaries.

***Our Business***

ImmunityBio, Inc. is a clinical-stage biotechnology company developing next-generation therapies and vaccines that complement, harness, and amplify the immune system to defeat cancers and infectious diseases. We strive to be a vertically-integrated immunotherapy company designing and manufacturing our products so they are more effective, accessible, more conveniently stored, and more easily administered to patients.

Our broad immunotherapy and cell therapy platforms are designed to attack cancer and infectious pathogens by activating both the innate immune system—natural killer (NK) cells, dendritic cells, and macrophages—and the adaptive immune system—B cells and T cells—in an orchestrated manner. The goal of this potentially best-in-class approach is to generate immunogenic cell death thereby eliminating rogue cells from the body whether they are cancerous or virally infected. Our ultimate goal is to employ this approach to establish an “immunological memory” that confers long-term benefit for the patient.

Although such designations may not lead to a faster development process or regulatory review and may not increase the likelihood that a product candidate will receive approval, Anktiva™ (N-803), our novel antibody cytokine fusion protein, has received *Breakthrough Therapy* and *Fast Track* designations in combination with bacillus Calmette-Guérin (BCG) from the United States (U.S.) Food and Drug Administration (FDA) for BCG-unresponsive non-muscle invasive bladder cancer (NMIBC) with carcinoma in situ (CIS). In May 2022, we announced the submission of a Biologics License Application (BLA) to the FDA for our product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease. In July 2022, we announced the FDA had accepted our BLA for review and set a target Prescription Drug User Fee Act (PDUFA) action date of May 23, 2023. On May 9, 2023, the FDA delivered a complete response letter to us regarding the BLA. The company plans to request a meeting with the FDA as soon as possible to address the subject matter of the letter and a response timeline, and plans to diligently address and resolve the issues identified and seek approval as expeditiously as possible. It is unclear when the FDA will approve our BLA, if at all.

Our platforms include 13 novel therapeutic agents either in clinical trials or for which we are developing protocols. We are currently engaged in 15 active clinical trials involving 10 of these agents. Seven of these trials are being sponsored by ImmunityBio while the remaining eight are investigator-led studies. Twelve of these trials are in Phase 2 or 3 development across eleven indications in liquid and solid tumors. These include bladder, pancreatic, and lung cancers, which are among the most frequent and lethal cancer types, and where there are high failure rates for existing standards of care or no available effective treatment. In infectious diseases, our pipeline currently targets such pathogens as the novel strain of the coronavirus (SARS-CoV-2) and human immunodeficiency virus (HIV).

We have established Good Manufacturing Practice (GMP) manufacturing capacity at scale with cutting-edge cell manufacturing expertise and ready-to-scale facilities, as well as extensive and seasoned research and development (R&D), clinical trial, and regulatory operations, and development teams.

## 2. Summary of Significant Accounting Policies

### ***Basis of Presentation***

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) and pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (SEC). The unaudited condensed consolidated financial statements reflect all adjustments which are, in the opinion of management, necessary for a fair presentation of our financial position and results of operations. The unaudited condensed consolidated financial statements do not include all information and notes required by U.S. GAAP for annual reports and therefore should be read in conjunction with our consolidated financial statements and the notes thereto contained in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 1, 2023. These interim financials are not necessarily indicative of results expected for the full fiscal year.

### ***Principles of Consolidation***

The accompanying unaudited condensed consolidated financial statements include the accounts of the company, its wholly-owned subsidiaries, and a variable interest entity (VIE) for which the company is the primary beneficiary. Any material intercompany transactions and balances have been eliminated upon consolidation. For consolidated entities where we have less than 100% of ownership, we record net loss attributable to noncontrolling interest on the unaudited condensed consolidated statements of operations equal to the percentage of the ownership interest retained in such entities by the respective noncontrolling parties.

We assess whether we are the primary beneficiary of a VIE at the inception of the arrangement and at each reporting date. This assessment is based on our power to direct the activities of the VIE that most significantly impact the VIE's economic performance and our obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE.

### ***Liquidity***

As of March 31, 2023, the company had an accumulated deficit of \$2.5 billion. We also had negative cash flows from operations of \$84.3 million for the three months ended March 31, 2023. The company will likely need additional capital to further fund the development of, and to seek regulatory approvals for, our product candidates, and to begin to commercialize any approved products.

The condensed consolidated financial statements have been prepared assuming the company will continue as a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business, and do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or amounts and classification of liabilities that may result from the outcome of the uncertainty of our ability to continue as a going concern. As a result of continuing anticipated operating cash outflows, we believe that substantial doubt exists regarding our ability to continue as a going concern without additional funding or financial support. However, we believe our existing cash, cash equivalents, and investments in marketable securities, together with capital to be raised through equity offerings (including but not limited to the offering, issuance and sale by us of our common stock that may be issued and sold under an "at-the-market" sales agreement (the Sale Agreement) with our sales agent (the ATM), of which we had \$225.4 million available for future issuance as of March 31, 2023, and a February 2023 shelf registration statement, of which we had \$640.0 million available for future offerings as of March 31, 2023), and our potential ability to borrow from affiliated entities, will be sufficient to fund our operations through at least the next 12 months following the issuance date of the condensed consolidated financial statements based primarily upon our Executive Chairman and Global Chief Scientific and Medical Officer's intent and ability to support our operations with additional funds, including loans from affiliated entities, as required, which we believe alleviates such doubt. See [Note 12, Stockholders' Deficit](#), for information regarding the ATM and the shelf registration statement.

We may also seek to sell additional equity, through one or more follow-on offerings, or in separate financings, or obtain a credit facility. However, we may not be able to secure such external financing in a timely manner or on favorable terms. Without additional funds, we may choose to delay or reduce our operating or investment expenditures. Further, because of the risk and uncertainties associated with the potential commercialization of our product candidates in development, we may need additional funds to meet our needs sooner than planned.

### ***Use of Estimates***

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, we evaluate our estimates, including those related to the valuation of equity-based awards, deferred income taxes and related valuation allowances, preclinical and clinical trial accruals, impairment assessments, contingent value right measurement and assessments, the measurement of right-of-use assets and lease liabilities, useful lives of long-lived assets, loss contingencies, fair value calculation of warrants and convertible promissory notes, fair value measurements, and the assessment of our ability to fund our operations for at least the next 12 months from the date of issuance of these condensed consolidated financial statements. We base our estimates on historical experience and on various other market-specific and relevant assumptions that we believe to be reasonable under the circumstances. Estimates are assessed each period and updated to reflect current information, such as the economic considerations related to the impact that the ongoing coronavirus pandemic could have on our significant accounting estimates. Actual results could differ from those estimates.

### ***Significant Accounting Policies***

There have been no material changes to our significant accounting policies from those described in Note 2, *Summary of Significant Accounting Policies*, of the “Notes to Consolidated Financial Statements” that appears in Part II, Item 8. “Financial Statements and Supplementary Data” of our Annual Report on Form 10-K filed with the SEC on March 1, 2023.

### ***Warrants***

The company accounts for warrants as either equity-classified or liability-classified instruments based on an assessment of the warrant’s specific terms and applicable authoritative guidance in Accounting Standards Codification (ASC) Topic 480, *Distinguishing Liabilities from Equity* (ASC 480), and ASC Topic 815, *Derivatives and Hedging* (ASC 815). The assessment considers whether the warrants are freestanding financial instruments pursuant to ASC 480, meet the definition of a liability pursuant to ASC 480, and whether the warrants meet all of the requirements for equity classification under ASC 815, including whether the warrants are indexed to the company’s own stock and whether the warrant holders could potentially require “net cash settlement” in a circumstance outside of the company’s control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of warrant issuance and as of each subsequent quarterly period end date while the warrants are outstanding.

For warrants that meet all criteria for equity classification, the warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For warrants that do not meet all the criteria for equity classification, the warrants are required to be recorded at their initial fair value on the date of issuance, and on each balance sheet date thereafter. Changes in the estimated fair value of the warrants are recognized as a non-cash change in fair value of warrant liabilities in *other income (expense), net*, on the condensed consolidated statements of operations. The fair value of the warrants was estimated using the Black-Scholes option pricing model.

### ***Fair Value Option (FVO) Election***

The company accounts for certain convertible notes issued during the three months ended March 31, 2023 under the fair value option (FVO) election of ASC 825, *Financial Instruments* (ASC 825), as discussed below.

The convertible notes accounted for under the FVO election are each debt host financial instruments containing embedded features wherein the entire financial instrument is initially measured at its issue-date estimated fair value and then subsequently remeasured at estimated fair value on a recurring basis at each reporting period date.

Changes in the estimated fair value of the convertible notes are recorded as *other income (expense), net* on the condensed consolidated statements of operations, except that the change in estimated fair value attributable to a change in the instrument-specific credit risks is recognized as a component of other comprehensive income. Since the underlying financial instrument was issued on March 31, 2023, we did not recognize any change in estimated fair values during the three months ended March 31, 2023.

**Basic and Diluted Net Loss per Share of Common Stock**

Basic net loss per share is calculated by dividing the net loss attributable to ImmunityBio common stockholders by the weighted-average number of common shares outstanding for the period. Diluted loss per share is computed by dividing net loss attributable to ImmunityBio common stockholders by the weighted-average number of common shares, including the number of additional shares that would have been outstanding if the potential common shares had been issued and if the additional common shares were dilutive.

For all periods presented, potentially dilutive securities are excluded from the computation of fully diluted loss per share as their effect is anti-dilutive. The following table details those securities that have been excluded from the computation of potentially dilutive securities:

	As of March 31,	
	2023	2022
	(Unaudited)	
Related-party convertible notes (1)	46,726,407	—
Outstanding third-party warrants	23,163,524	—
Outstanding stock options	9,159,665	8,819,466
Outstanding RSUs	6,188,292	6,149,411
Outstanding related-party warrants	1,638,000	1,638,000
Total	<u>86,875,888</u>	<u>16,606,877</u>

(1) Amount excludes the shares related to the related-party convertible note with a principal amount of \$30.0 million issued on March 31, 2023 as the conversion price has not yet been determined. See [Note 9, Related-Party Debt](#), for further information.

**Recent Accounting Pronouncements****Application of New or Revised Accounting Standards – Not Yet Adopted**

In June 2022, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2022-03, *Fair Value Measurement* (Topic 820): *Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions*, which amends the guidance in Topic 820, *Fair Value Measurement*, to clarify that a contractual restriction on the sale of an equity security is not considered part of the unit of account of the equity security and, therefore, is not considered in measuring fair value. The amendments also clarify that an entity cannot, as a separate unit of account, recognize and measure a contractual sale restriction. In addition, ASU 2022-03 introduces new disclosure requirements for equity securities subject to contractual sale restrictions that are measured at fair value. ASU 2022-03 is effective for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. We are currently evaluating the impact of this standard on our condensed consolidated financial statements.

In March 2023, the FASB issued ASU 2023-01, *Leases (Topic 842): Common Control Arrangements*, which requires that leasehold improvements associated with common control leases be amortized over the useful life of the leasehold improvements to the common control group, regardless of the lease term. ASU 2023-01 is effective for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. We are currently evaluating the impact of this standard on our condensed consolidated financial statements and related disclosures.

Other recent authoritative guidance issued by the FASB (including technical corrections to the ASC), the American Institute of Certified Public Accountants, and the SEC during the three months ended March 31, 2023 did not, or are not expected to, have a material effect on our condensed consolidated financial statements.

### 3. Financial Statement Details

#### *Prepaid Expenses and Other Current Assets*

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

	March 31, 2023 (Unaudited)	December 31, 2022
Prepaid research and development costs	\$ 6,741	\$ 11,704
Prepaid services	3,246	8,013
Prepaid supplies	2,160	2,160
Prepaid insurance	2,150	2,282
Prepaid software license fees	1,672	2,195
Insurance premium financing asset	357	1,417
Other	4,428	3,732
Prepaid expenses and other current assets	<u>\$ 20,754</u>	<u>\$ 31,503</u>

#### *Property, Plant and Equipment, Net*

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

	March 31, 2023 (Unaudited)	December 31, 2022
Leasehold improvements	\$ 73,078	\$ 68,710
Equipment	68,973	67,945
Construction in progress	81,941	72,693
Furniture & fixtures	1,931	1,906
Software	1,657	1,657
Gross property, plant and equipment	227,580	212,911
Less: Accumulated depreciation and amortization	73,415	69,252
Property, plant and equipment, net	<u>\$ 154,165</u>	<u>\$ 143,659</u>

Depreciation expense related to property, plant and equipment totaled \$4.2 million and \$3.8 million for the three months ended March 31, 2023 and 2022, respectively.

**Intangible Assets, Net**

The gross carrying amounts and accumulated amortization of intangible assets are as follows at the dates indicated (in thousands):

	March 31, 2023				
	Weighted-Average Life (in years)	Gross Carrying Amount	Accumulated Amortization	Impairment	Net Carrying Amount
Finite-lived: Favorable leasehold rights	8.9	\$ 20,398	\$ (2,295)	\$ —	\$ 18,103
Indefinite-lived: In-process research and development (IPR&D)		1,399	—	—	1,399
<b>Total intangible assets</b>		<b>\$ 21,797</b>	<b>\$ (2,295)</b>	<b>\$ —</b>	<b>\$ 19,502</b>

	December 31, 2022				
	Weighted-Average Life (in years)	Gross Carrying Amount	Accumulated Amortization	Impairment	Net Carrying Amount
Finite-lived: Favorable leasehold rights	9.1	\$ 20,398	\$ (1,785)	\$ —	\$ 18,613
Finite-lived: Organized workforce		831	(150)	(681)	—
<b>Total finite-lived intangible assets</b>		<b>21,229</b>	<b>(1,935)</b>	<b>(681)</b>	<b>18,613</b>
Indefinite-lived: IPR&D		1,390	—	—	1,390
<b>Total intangible assets</b>		<b>\$ 22,619</b>	<b>\$ (1,935)</b>	<b>\$ (681)</b>	<b>\$ 20,003</b>

In connection with the acquisition of the Dunkirk facility in 2022, we acquired finite-lived intangibles consisting of favorable leasehold rights and an organized workforce. We recorded amortization expense of our finite-lived intangibles totaling \$0.5 million and \$0.3 million in *research and development expense*, on the condensed consolidated statements of operations for the three months ended March 31, 2023 and 2022, respectively.

Future amortization expense associated with our finite-lived intangible assets is as follows (in thousands):

Years ending December 31:	Finite-lived Intangible Assets
2023 (excluding the three months ended March 31, 2023)	\$ 1,530
2024	2,040
2025	2,040
2026	2,040
2027	2,040
Thereafter	8,413
<b>Total</b>	<b>\$ 18,103</b>

### **Accrued Expenses and Other Liabilities**

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

	March 31, 2023 (Unaudited)	December 31, 2022
Accrued research and development costs	\$ 15,916	\$ 1,930
Accrued bonus	14,642	12,068
Accrued professional and service fees	9,229	6,685
Accrued preclinical and clinical trial costs	5,523	4,985
Accrued compensation	5,327	6,040
Accrued construction costs	2,136	7,072
Financing obligation – current portion	357	1,417
Other	988	1,628
Accrued expenses and other liabilities	<u>\$ 54,118</u>	<u>\$ 41,825</u>

### **Interest and Investment Income, Net**

Interest and investment income, net consists of the following (in thousands):

	Three Months Ended March 31,	
	2023	2022
	(Unaudited)	
Unrealized gains from equity securities	\$ 135	\$ 1,419
Interest income	284	1,296
Investment amortization expense, net	260	(1,049)
Net realized losses on investments	(6)	—
Interest and investment income, net	<u>\$ 673</u>	<u>\$ 1,666</u>

Interest income includes interest from marketable securities, convertible notes receivable, other assets, and on bank deposits.

### **Interest expense**

Interest expense consists of the following (in thousands):

	Three Months Ended March 31,	
	2023	2022
	(Unaudited)	
Interest expense on related-party notes	\$ (18,260)	\$ (8,101)
Amortization of related-party notes discounts	(11,536)	(370)
Other interest expense	(20)	(20)
Interest expense	<u>\$ (29,816)</u>	<u>\$ (8,491)</u>



#### 4. Financial Instruments

##### Investments in Marketable Debt Securities

As of March 31, 2023, the weighted-average remaining contractual life, amortized cost, gross unrealized gains, gross unrealized losses and fair value of marketable debt securities, which were considered as available-for-sale, by type of security were as follows (in thousands):

	March 31, 2023				
	(Unaudited)				
	Weighted-Average Remaining Contractual Life (in years)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
<b>Current:</b>					
Foreign bonds	2.0	\$ 107	\$ —	\$ —	\$ 107
Mutual funds		39	—	(2)	37
Current portion		146	—	(2)	144
<b>Noncurrent:</b>					
Foreign bonds	0.3	902	—	(82)	820
Total		<u>\$ 1,048</u>	<u>\$ —</u>	<u>\$ (84)</u>	<u>\$ 964</u>

As of December 31, 2022, the weighted-average remaining contractual life, amortized cost, gross unrealized gains, gross unrealized losses and fair value of marketable debt securities, which were considered as available-for-sale, by type of security were as follows (in thousands):

	December 31, 2022				
	Weighted-Average Remaining Contractual Life (in years)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
<b>Current:</b>					
Mutual funds		\$ 38	\$ —	\$ (2)	\$ 36
<b>Noncurrent:</b>					
Foreign bonds	4.5	932	—	(92)	840
Total		<u>\$ 970</u>	<u>\$ —</u>	<u>\$ (94)</u>	<u>\$ 876</u>

At March 31, 2023, 14 of the securities were in an unrealized loss position. Accumulated unrealized losses on marketable debt securities that have been in a continuous loss position for less than 12 months and more than 12 months were as follows (in thousands):

	March 31, 2023			
	(Unaudited)			
	Less than 12 months		More than 12 months	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
Mutual funds	\$ —	\$ —	\$ 37	\$ (2)
Foreign bonds	581	(58)	346	(24)
Total	\$ 581	\$ (58)	\$ 383	\$ (26)

	December 31, 2022			
	Less than 12 months		More than 12 months	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
Mutual funds	\$ —	\$ —	\$ 36	\$ (2)
Foreign bonds	—	—	840	(92)
Total	\$ —	\$ —	\$ 876	\$ (94)

### Marketable Equity Securities

We held investments in marketable equity securities with readily determinable fair values of \$2.6 million and \$2.5 million as of March 31, 2023 and December 31, 2022, respectively. Unrealized gains recorded on these securities totaled \$0.1 million and \$1.4 million for the three months ended March 31, 2023 and 2022, respectively, in *interest and investment income, net*, on the condensed consolidated statements of operations.

## 5. Fair Value Measurements

Fair value is defined as an exit price that would be received from the sale of an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. We use a three-tier fair value hierarchy to classify and disclose all assets and liabilities measured at fair value on a recurring basis, as well as assets and liabilities measured at fair value on a non-recurring basis, in periods subsequent to their initial measurement. The hierarchy requires us to use observable inputs when available, and to minimize the use of unobservable inputs, when determining fair value.

The three tiers are defined as follows:

- Level 1—Observable inputs that reflect quoted market prices (unadjusted) for identical assets or liabilities in active markets at the measurement date. Since valuations are based on quoted prices that are readily and regularly available in an active market, the valuation of these products does not entail a significant degree of judgment. Our Level 1 assets consist of bank deposits, money market funds, and marketable equity securities.
- Level 2—Observable inputs other than quoted prices in active markets that are observable either directly or indirectly in the marketplace for identical or similar assets and liabilities. Our Level 2 assets consist of corporate debt securities including commercial paper, government-sponsored securities and corporate bonds, as well as foreign municipal securities.
- Level 3—Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

We utilize a third-party pricing service to assist in obtaining fair value pricing for our investments in marketable debt securities. Inputs are documented in accordance with the fair value disclosure hierarchy. The fair values of financial instruments other than marketable securities and cash and cash equivalents are determined through a combination of management estimates and third-party valuations.

### Recurring Valuations

Financial assets and liabilities measured at fair value on a recurring basis are summarized below (in thousands):

	Fair Value Measurements at March 31, 2023			
	(Unaudited)			
	Total	Level 1	Level 2	Level 3
<b>Assets:</b>				
Current:				
Cash and cash equivalents	\$ 88,481 (1)	\$ 73,487	\$ 14,994	\$ —
Equity securities	2,643	2,643	—	—
Foreign bonds	107	107	—	—
Mutual funds	37	37	—	—
Noncurrent:				
Foreign bonds	820	—	820	—
Total assets measured at fair value	<u>\$ 92,088</u>	<u>\$ 76,274</u>	<u>\$ 15,814</u>	<u>\$ —</u>
<b>Liabilities:</b>				
Current:				
Related-party convertible note payable	\$ (29,850) (2)	\$ —	\$ —	\$ (29,850)
Contingent consideration obligations	(20)	—	—	(20)
Noncurrent:				
Warrant liabilities	(17,780) (3)	—	—	(17,780)
Total liabilities measured at fair value	<u>\$ (47,650)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (47,650)</u>
Fair Value Measurements at December 31, 2022				
	Total	Level 1	Level 2	Level 3
<b>Assets:</b>				
Current:				
Cash and cash equivalents	\$ 104,641 (1)	\$ 63,860	\$ 40,781	\$ —
Equity securities	2,507	2,507	—	—
Mutual funds	36	36	—	—
Noncurrent:				
Foreign bonds	840	—	840	—
Total assets measured at fair value	<u>\$ 108,024</u>	<u>\$ 66,403</u>	<u>\$ 41,621</u>	<u>\$ —</u>
<b>Liabilities at fair value:</b>				
Current:				
Contingent consideration	\$ (19)	\$ —	\$ —	\$ (19)
Noncurrent:				
Warrant liability	(21,636) (3)	—	—	(21,636)
Total liabilities measured at fair value	<u>\$ (21,655)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (21,655)</u>

- (1) As of March 31, 2023, the Level 2 measurements include \$15.0 million in U.S. government agency securities with original maturities of less than 90 days. As of December 31, 2022, the Level 2 measurements include \$32.0 million in U.S. government agency securities and \$8.8 million in corporate debt securities with original maturities of less than 90 days.
- (2) As of March 31, 2023, the company has a related-party convertible note payable with a principal amount of \$30.0 million, which is accounted for under the ASC 825-10-15-4 FVO election. Under the FVO election, the financial instrument is initially measured at its issue-date estimated fair value and subsequently re-measured at estimated fair value on a recurring basis at each reporting period date. The company's other related-party notes are not accounted for under the fair value election. See [Note 9](#), Related-Party Debt, for further information. The estimated fair value of the convertible note was computed using a discounted cash flow method with the following unobservable assumptions:

	<b>March 31, 2023</b>
	<b>(Unaudited)</b>
Expected market yield	17.5 %
Discount period	0.1 years
Discount factor	0.98

- (3) Third-Party Warrant Liabilities

*December 2022 Warrants*

In connection with the December 12, 2022 registered direct offering of common stock, the company issued 9,090,909 warrants (December 2022 Warrants). The warrants were classified as a liability at their fair value upon the issuance. As of March 31, 2023, all warrants were outstanding. The estimated fair value of the warrants was computed using the Black-Scholes option pricing model with the following unobservable assumptions at the following date:

	<b>March 31, 2023</b>
	<b>(Unaudited)</b>
Exercise price per share	\$6.60
Expected term	1.7 years
Expected average volatility	129.3 %
Expected dividend yield	—
Risk-free interest rate	4.2 %

The change in the carrying amount of the December 2022 Warrants was as follows (in thousands):

	<b>(Unaudited)</b>
Beginning fair value, at December 31, 2022	\$ 21,636
Change in fair value	(15,818)
Ending fair value, at March 31, 2023	<u>\$ 5,818</u>

### February 2023 Warrants

In connection with the February 15, 2023 registered direct offering of common stock, the company issued 14,072,615 warrants (February 2023 Warrants). The warrants were classified as a liability at its fair value upon the issuance. As of March 31, 2023, all warrants were outstanding. The estimated fair value of the warrants was computed using the Black-Scholes option pricing model with the following unobservable assumptions at the following dates:

	March 31, 2023	Issuance Date February 15, 2023
	(Unaudited)	
Exercise price per share	\$4.26	\$4.26
Expected term	1.9 years	2.0 years
Expected average volatility	127.8 %	97.0 %
Expected dividend yield	—	—
Risk-free interest rate	4.1 %	4.6 %

Changes in the carrying amount of the February 2023 Warrants were as follows (in thousands):

	(Unaudited)
Fair value at the issuance date	\$ 23,698
Change in fair value	(11,736)
Ending fair value, at March 31, 2023	\$ 11,962

### Nonrecurring Valuations

We measured the fair value of the fixed-rate promissory notes and variable-rate promissory notes before and after amendments that were entered on August 31, 2022, as they were accounted for under the debt extinguishment accounting model. We used discounted cash flow analyses for promissory notes without a holder conversion option and a binomial lattice convertible note model for the fixed-rate promissory notes with a holder conversion option. Since certain of the factors analyzed are considered to be unobservable inputs, both the discounted cash flow model and the lattice model are considered to be a Level 3 valuation. See [Note 9, Related-Party Debt](#), for additional information.

## 6. Collaboration and License Agreements and Acquisition

### Collaboration Agreement

#### Amyris Joint Venture

In December 2021, ImmunityBio and Amyris, Inc. (Amyris) entered into a 50:50 joint venture arrangement and formed a new limited liability company to conduct the business of the joint venture. The purpose of the joint venture is to accelerate commercialization of a next-generation COVID-19 vaccine utilizing an RNA vaccine-platform. As part of the limited liability agreement, Amyris contributed \$1.0 million in cash and rights to its license agreement with the Access to Advanced Health Institute (AAHI) for an RNA platform for the field of COVID-19. ImmunityBio contributed \$1.0 million in cash and priority access to its manufacturing capacity for the joint venture product. Both parties agreed to enter into a separate manufacturing and supply agreement and a sublicense agreement following the execution of the joint venture agreement.

The joint venture agreement stipulates the initial terms for equal representation in the management of the newly-formed joint venture. The joint venture is managed by a board of directors consisting of four directors: two appointed by the company and two appointed by Amyris. Both parties agreed to make additional capital contributions in cash, in proportion to their respective interests, as determined by the board of directors of the joint venture.

We considered the joint venture entity as a VIE and determined that we are not the primary beneficiary of the VIE. In February 2022, we made a cash investment totaling \$1.0 million in the joint venture's common stock. We account for our investment in the joint venture using the equity method of accounting, and recorded our 50% share of the net loss from the joint venture totaling \$2.3 million and \$0.2 million, respectively, in *other income (expense), net*, on the condensed consolidated statements of operations for the three months ended March 31, 2023 and 2022. Such losses incurred during the three months ended March 31, 2023 were attributed to expenses incurred by us on behalf of the joint venture. We are not obligated to fund the joint venture's potential future losses. As of March 31, 2023, the carrying amount of our equity investment in the joint venture was zero.

### **License Agreements**

#### ***3M Innovative Properties Company (3M IPC) and AAHI License Agreement***

We have licensed rights to 3M-052, a synthetic TLR7/8 agonist, 3M-052 formulations and related technology from 3M IPC and its affiliates and AAHI. In November 2021 we obtained nonexclusive rights in the field of SARS-CoV-2 and in June 2022 we modified those rights and expanded the scope of the license to include (1) SARS-CoV-2 and other infectious diseases including malaria, HIV, tuberculosis, hookworm and varicella zoster on an exclusive basis in countries other than low- and middle-income countries (LMIC), and (2) oncology applications, when used in combination with our proprietary technology and/or IL-15 agonists. In consideration for the license, we agreed to make certain periodic license payments, including \$2.25 million each year through June 2025, with the June 2022 payment being partially offset by the \$0.5 million previously paid under the initial November 2021 license agreement. We have also agreed to make payments upon the achievement of certain regulatory milestone events and tiered royalties ranging from the low to high single-digits as a percentage of net sales. Beginning in April 2026, the annual minimum licensing payment is \$1.0 million, which can be credited against any royalty payments due under this agreement.

In June 2022, we made a payment of \$1.75 million for the annual license maintenance fee. We expensed \$0.4 million for the three months ended March 31, 2023, in *research and development expense*, on the condensed consolidated statement of operations.

#### ***AAHI License Agreements***

In May 2021, we entered into two license agreements with AAHI pursuant to which we received a license to certain patents and know-how relating to AAHI's (i) adjuvant formulations for the treatment, prevention and/or diagnosis of SARS-CoV-2 (the AAHI Adjuvant Formulation License Agreement) and (ii) RNA vaccine platform as further described below (the AAHI RNA License Agreement). Under both agreements, we were obligated to pay one-time, non-creditable, non-refundable upfront cash payments totaling \$2.0 million. In addition, under the AAHI Adjuvant Formulation License Agreement we owe milestone payments to a total of up to \$2.5 million based on the achievement of certain development and regulatory milestones for the first licensed product and royalties on annual net sales of licensed products on a country-by-country and product-by-product basis of a low-single digit percentage, subject to certain royalty-reduction provisions. No milestone fees were incurred for the three months ended March 31, 2023.

In September 2021, we amended and restated the AAHI RNA License Agreement, pursuant to which AAHI granted us an exclusive, worldwide, sublicensable license to AAHI's rights to an RNA vaccine platform for the development and commercialization of certain therapeutic, diagnostic or prophylactic products for the prevention, treatment or diagnosis of any indication, other than those subject to pre-existing third-party license grants, including, without limitation, SARS-CoV-2. Pursuant to the terms of the amended and restated AAHI RNA License Agreement, we made a one-time, non-creditable, non-refundable, upfront payment to AAHI of \$1.5 million and a license maintenance fee of \$3.0 million in June 2022. The company is required to pay license maintenance fees to AAHI of \$5.5 million annually from 2023 through 2030. The company may terminate the restated agreement without cause by paying AAHI a \$10.0 million one-time early termination fee. In addition, the milestone payments to AAHI based on the achievement of certain development and regulatory milestones for the first licensed product were amended to a total of up to \$4.0 million. We are required to pay royalties on annual net sales of licensed products on a country-by-country and product-by-product basis of a low to mid-single digit percentage. We recorded \$0.8 million in *research and development expense*, on the condensed consolidated statement of operations during the three months ended March 31, 2023.

In connection with the license agreements, in May 2021 we also entered into a sponsored research agreement with the AAHI pursuant to which we will fund continued research of at least \$2.0 million per year, payable in four equal quarterly installments each year until May 2024, or such year of earlier termination. No expenses were incurred for the three months ended March 31, 2023.

## Acquisition

### Dunkirk Facility Leasehold Interest

On February 14, 2022, we completed the acquisition of a leasehold interest in approximately 409,000 rentable square feet of current Good Manufacturing Practice (cGMP) ISO Class 5 pharmaceutical manufacturing space in western New York (the Dunkirk Facility) from Athenex, Inc. (the Seller), which we believe will provide us with a state-of-the-art biotech production center that will substantially expand and diversify our manufacturing capacity in the U.S. and ability to scale production associated with certain of our product candidates. The company accounted for the transaction as an asset acquisition because the Dunkirk Facility's integrated set of assets and activities does not meet the definition of a business.

The total consideration for the acquisition was approximately \$40.5 million, including a cash payment of \$40.0 million, and transaction costs of approximately \$0.5 million. The following table summarizes the fair value of assets acquired as of the acquisition date (in thousands):

Construction in progress	\$	10,043
Leasehold improvements		6,253
Finite-lived intangible assets (1)		21,229
Other depreciable assets and prepaid expenses		2,983
Total consideration	\$	<u>40,508</u>

(1) See [Note 3](#), *Financial Statement Details—Intangible Assets, Net*, for further information.

Upon the closing of the Dunkirk transaction, the company became the tenant of the Dunkirk Facility under the Fort Schuyler Management Corporation Lease, dated October 1, 2021 and as amended as of the February 14, 2022 closing date (as amended, the Dunkirk Lease), with Fort Schuyler Management Corporation, a not-for-profit corporation affiliated with the State of New York (FSMC) as landlord. The Dunkirk Facility, as well as certain equipment, is owned by FSMC and is leased to us under the Dunkirk Lease. Our annual lease payment will be \$2.00 per year for an initial 10-year term, with an option to renew the lease under substantially the same terms and conditions for an additional 10-year term. As part of the transaction, we assumed certain of the Seller's obligations under various third-party agreements (the Facility Agreements), subject to the terms and conditions of the purchase agreement by and between the company and Seller dated as of January 7, 2022, and committed to spend an aggregate of \$1.52 billion on operational expenses during the initial term, and an additional \$1.50 billion on operational expenses if we elect to renew the lease for the additional 10-year term. We also committed to hiring 450 employees at the Dunkirk Facility within the first five years of operations, with 300 such employees to be hired within the first 2.5 years of operation. We are eligible for certain sales-tax exemption savings during the development of the Dunkirk Facility, and certain property tax savings over the next 20 years, subject to certain terms and conditions, including performance of certain of the obligations described above. Failure to satisfy the obligations over the lease term may give rise to certain rights and remedies of governmental authorities including, for example, termination of the Dunkirk Lease and other Facility Agreements and potential recoupment of a percentage of the grant funding received by the Seller for construction of the facility and other benefits received, subject to the terms and conditions of the applicable agreements.

Although we believe that governmental funding will assist in funding a portion of the further build-out of the Dunkirk Facility, which we estimate to be approximately \$8.0 million to \$10.0 million of governmental funding remaining available as of March 31, 2023, there can be no assurance as to the final acceptance and timing of the requests for governmental funding that we submit, and we will need to plan and fund most of the additional build-out of, and purchase additional equipment for, the Dunkirk Facility in connection with our planned full operations. In addition, any future governmental funding will be subject to the eligibility of submitted expenses, as well as our compliance with the obligations that we are subject to pursuant to the agreements with parties regarding the Dunkirk Facility as described above.

## 7. Commitments and Contingencies

### **Contingent Consideration Related to Business Combinations**

#### *VivaBioCell, S.p.A.*

In April 2015, NantWorks, LLC (NantWorks), a related party, acquired a 100% interest in VivaBioCell, S.p.A. (VivaBioCell) through its wholly-owned subsidiary, VBC Holdings, LLC, (VBC Holdings) for \$0.7 million, less working capital adjustments. In June 2015, NantWorks contributed its equity interest in VBC Holdings to the company, in exchange for cash consideration equal to its cost basis in the investment. VivaBioCell develops bioreactors and products based on cell culture and tissue engineering in Italy.

In connection with our acquisition of VBC, we are obligated to pay the former owners contingent consideration upon the achievement of certain milestones related to the GMP-in-a-Box technology. A clinical milestone totaling \$0.8 million was earned by the former owners of VivaBioCell, of which \$0.4 million was paid during 2021, with the remaining clinical obligation settled in September 2022. If a government agency unconditionally approves the GMP-in-a-Box technology for commercial sale (the regulatory milestone) in the future, we will be obligated to pay an additional approximately \$2.2 million to the former owners.

#### *Altor BioScience Corporation*

In connection with the 2017 acquisition of Altor BioScience Corporation (Altor), we issued contingent value rights (CVRs) under which we agreed to pay the prior stockholders of Altor approximately \$304.0 million contingent consideration upon the successful regulatory approval of a BLA by the FDA, or foreign equivalent, for N-803 by December 31, 2022 and approximately \$304.0 million contingent consideration upon calendar-year worldwide net sales of N-803 exceeding \$1.0 billion prior to December 31, 2026, with amounts payable in cash or shares of our common stock or a combination thereof. As the transaction was recorded as an asset acquisition, future CVR payments will be recorded when the corresponding events are probable of achievement or the consideration becomes payable.

With respect to the regulatory milestone CVR agreement, in May 2022 we announced the submission of a BLA to the FDA for our product candidate, Anktiva (N-803) in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease. In July 2022 we announced that the FDA had accepted our BLA for review and set a target PDUFA action date of May 23, 2023. On May 9, 2023, the FDA delivered a complete response letter to us regarding the BLA. The company plans to request a meeting with the FDA as soon as possible to address the subject matter of the letter and a response timeline, and plans to diligently address and resolve the issues identified and seek approval as expeditiously as possible. It is unclear when the FDA will approve our BLA, if at all. The FDA did not approve our BLA on or before December 31, 2022, and therefore the regulatory milestone was not met, and the regulatory milestone CVR agreement terminated in accordance with its terms.

With respect to the net sales milestone CVR agreement, as of March 31, 2023, Dr. Soon-Shiong and his related party hold approximately \$139.8 million of net sales CVRs and they have both irrevocably agreed to receive shares of the company's common stock in satisfaction of their CVRs. We may be required to pay the other prior Altor stockholders up to \$164.2 million for their net sales CVRs should they choose to have their CVRs paid in cash instead of common stock.

### **Litigation**

From time to time, we may be involved in various claims and legal proceedings relating to claims arising out of our operations. We are not currently a party to any legal proceedings that, in the opinion of our management, are likely to have a material adverse effect on our business. If we are served with any such complaints, we will assess at that time any contingencies for which we may need to reserve. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources, and other factors.

#### *Altor BioScience, LLC Litigation*

In 2017, NantCell, Inc. (NantCell) announced it had entered into a definitive merger agreement to acquire Altor BioScience Corporation. An action captioned *Gray v. Soon-Shiong, et al.* was filed in Delaware Chancery Court by plaintiffs Clayland Boyden Gray (Gray) and Adam R. Waldman. The plaintiffs, two minority stockholders, asserted claims against the company and other defendants for (1) breach of fiduciary duty and (2) aiding and abetting breach of fiduciary duty and filed a motion to enjoin the merger. The court denied the motion and permitted the merger to close.



Subsequent to the close of the merger, in 2017 the plaintiffs (joined by two additional minority stockholders, Barbara Sturm Waldman and Douglas E. Henderson (Henderson)) filed a second amended complaint, including appraisal claims, and which the defendants subsequently moved to dismiss. In a second action, Dyad Pharmaceutical Corporation (Dyad) filed a petition in Delaware Chancery Court for appraisal in connection with the merger. The defendants moved to dismiss the appraisal petition in 2018. The court issued an oral ruling in 2019 that dismissed certain claims and dismissed Altor BioScience from the action. The following claims remained: (a) the appraisal claims by all plaintiffs and Dyad (against Altor BioScience, LLC), and (b) Henderson's claims for breach of fiduciary duty and aiding and abetting breach of fiduciary duty.

In 2019, the court issued a written order implementing its ruling on the defendants' motions (the Implementing Order). In the Implementing Order, the court confirmed that all fiduciary duty claims brought by Gray, both individually and as trustee of the Gordon Gray Trust f/b/o C. Boyden Gray, were dismissed. The plaintiffs then moved for leave to file a third amended complaint to add two former Altor stockholders as plaintiffs and a fiduciary duty claim on behalf of a purported class of former Altor stockholders, which the defendants opposed.

In 2020, the court granted the plaintiffs' motion, and the plaintiffs filed the third amended complaint. In 2020, the defendants answered the third amended complaint and asserted counterclaims against the plaintiffs. The defendants sought damages for attorneys' fees and costs incurred as a result of the breaches of "standstill" agreements and of stockholder releases. The plaintiffs filed an answer denying the counterclaims and asserting defenses.

The shares of the former Altor stockholders seeking appraisal met the definition of dissenting shares under the merger agreement and were not entitled to receive any portion of the merger consideration at the closing date, given that those shares were the subject of the above-described appraisal claims.

In late March 2022, the company agreed to the terms of a settlement with the appraisal petitioners, without any admission of liability or fault. The settlement provided that in exchange for complete releases, the appraisal petitioners, who as a group held 3,167,565 dissenting Altor shares, collectively would receive an aggregate of 2,229,296 shares of the company's common stock issued in a private placement, plus an aggregate of \$21.13 in cash in lieu of fractional shares. The company's Board of Directors approved the settlement and stock issuance in April 2022, and the court approved the settlement and dismissed the appraisal petitioners' claims on July 9, 2022. On July 9, 2022, the company issued 2,229,296 shares of its common stock with an aggregate market value of \$10.7 million, based on the closing price of its common stock on the Nasdaq as of July 8, 2022, to the appraisal petitioners pursuant to the court-approved settlement agreement.

In late April 2022, the company also agreed to the terms of a settlement with the putative class plaintiffs without any admission of liability or fault. In exchange for class-wide releases, the company committed to make a settlement payment of \$5.0 million in cash by December 31, 2022. On December 8, 2022, the Delaware Court of Chancery entered a final judgment approving the settlement, and the company timely made the \$5.0 million settlement payment.

#### *Sorrento Therapeutics, Inc. Litigation*

Sorrento Therapeutics, Inc. (Sorrento), derivatively on behalf of Immunotherapy NANTibody, LLC (NANTibody) filed an action in the Superior Court of California, Los Angeles County (the Superior Court) against the company's subsidiary NantCell, Dr. Soon-Shiong, and Charles Kim. The action alleged that the defendants improperly caused NANTibody to acquire IgDraSol, Inc. (IgDraSol) from NantPharma, LLC (NantPharma) and sought to have the transaction undone and the purchase amount returned to NANTibody. In 2019, we filed a demurrer to several causes of action alleged in the Superior Court action, and Sorrento filed an amended complaint, eliminating Mr. Kim as a defendant and dropping the causes of action we had challenged in our demurrer. The company believes the case is without merit and intends to vigorously defend against the claims asserted. Trial has been set to commence in Sorrento's Superior Court action on July 17, 2023.

Also in 2019, the company and Dr. Soon-Shiong filed cross-claims in the Superior Court action against Sorrento and its Chief Executive Officer Henry Ji, asserting claims for fraud, breach of contract, breach of the covenant of good faith and fair dealing, tortious interference with contract, unjust enrichment, and declaratory relief. Our claims alleged that Dr. Ji and Sorrento breached the terms of an exclusive license agreement between the company and Sorrento related to Sorrento's antibody library and that Sorrento did not perform its obligations under the exclusive license agreement. The Superior Court ruled that the company's claims should be pursued in arbitration and that Dr. Soon-Shiong's claims could be pursued in Superior Court.

In 2019, the company, along with NANTibody, filed an arbitration against Sorrento and Dr. Ji asserting our claims relating to the exclusive license agreement. Sorrento filed counterclaims against the company and NANTibody in the arbitration. The hearings in the NANTibody arbitration commenced in April 2021 and concluded in early August 2021. After post-hearing briefing was concluded, the parties were notified on November 30, 2021 that the arbitrator in the NANTibody arbitration had passed away. A substitute arbitrator was appointed on February 25, 2022, and the parties worked with the substitute arbitrator to conclude the proceedings. Additional hearing sessions were held in May and July 2022, and summations took place on August 2, 2022.

On December 2, 2022, the arbitrator issued a final award finding that Sorrento had breached the two exclusive license agreements with NantCell and NANTibody. The arbitrator awarded NantCell approximately \$156.8 million and NANTibody approximately \$16.7 million, plus post-award interest accruing at a daily rate. On December 21, 2022, NantCell and NANTibody filed petitions in the Superior Court to confirm the arbitration award; on January 16, 2023, Sorrento filed a response to the petitions and moved to vacate the award. On February 7, 2023, after a hearing, the Superior Court entered orders confirming the arbitration award and denying Sorrento's motion to vacate. The Superior Court entered judgments against Sorrento in the aggregate amount of approximately \$176.4 million plus 10% post-judgment interest, of which approximately \$159.4 million is payable to NantCell, and the remainder of which is payable to NANTibody. On February 13, 2023, Sorrento informed counsel to the company that it had filed a Chapter 11 proceeding in the U.S. District Court for the Southern District of Texas, *In re: Sorrento Therapeutics, Inc., et al.*, Case No. 23-bk-90085 (Bankr. S.D. Tex.) (DRJ). The company intends to continue to pursue vigorously, consistent with its rights in light of Sorrento's Chapter 11 filing, the collection of the judgments from Sorrento, but we make no assurances that we will receive the full amount or with respect to the timing of our receipt of any funds. As of March 31, 2023, we have not determined the amount we are likely to recover, and thus have not recorded any receivables in relation to the judgments.

The Superior Court action remains pending, and it remains to be determined how, if at all, the award in the arbitration will affect the Superior Court action. An estimate of the possible loss or range of loss resulting from the Superior Court litigation cannot be made at this time.

#### *Shenzhen Beike Biotechnology Co. Ltd. Arbitration*

In 2020, we received a Request for Arbitration before the International Chamber of Commerce, International Court of Arbitration. The arbitration relates to a license, development, and commercialization agreement that Altor entered into with Beike in 2014, which agreement was amended and restated in 2017, pursuant to which Altor granted to Beike an exclusive license to use, research, develop and commercialize products based on N-803 in China for human therapeutic uses. In the arbitration, Beike is asserting a claim for breach of contract under the license agreement. Among other things, Beike alleges that we failed to use commercially reasonable efforts to deliver to Beike materials and data related to N-803. Beike is seeking specific performance and declaratory relief for the alleged breaches. On September 25, 2020, the parties entered into a standstill and tolling agreement (standstill agreement) under which, among other things, the parties affirmed they will perform certain of their obligations under the license agreement by specified dates and agreed that all deadlines in the arbitration are indefinitely extended. The standstill agreement could be terminated by any party on ten calendar days' notice, and upon termination, the parties had the right to pursue claims arising from the license agreement in any appropriate tribunal. On March 20, 2023, we terminated the standstill agreement, and on April 11, 2023, Beike served an amended Request for Arbitration. We have until May 19, 2023 to file a response. Given that this action remains at the pleading stage and no discovery has occurred, it remains too early to evaluate the likely outcome of the case or to estimate any range of potential loss. We believe the claims lack merit and intend to defend the case vigorously and that we may have counterclaims.

#### *Stipulation of Settlement*

In 2019, following approval by our Board of Directors, we entered into a settlement agreement (the Stipulation of Settlement) with three stockholders of the company, each of whom had submitted a stockholder demand for the Board of Directors to take action to remedy purported harm to the company resulting from certain alleged wrongful conduct concerning, among other things, disclosures about Dr. Soon-Shiong's compensation and a related-party lease agreement. The Stipulation of Settlement called for us to adopt certain governance changes, and for the three stockholders to file a stockholder derivative action in the Superior Court of the State of California, County of San Diego, followed by an application for court approval of the Stipulation of Settlement. The court entered an order preliminarily approving the Stipulation of Settlement. Pursuant to the Stipulation of Settlement, we provided stockholders with notice of the settlement and the final settlement hearing.

## Commitments

We did not enter into any significant contracts during the three months ended March 31, 2023, other than those disclosed in these condensed consolidated financial statements.

In addition, we are also a party to various contracts with contract research organizations and contract manufacturers that generally provide for termination on notice, with the exact amounts in the event of termination to be based on the timing of the termination and the terms of the agreement. There have been no material changes in unconditional purchase commitments from those disclosed in Note 7, *Commitments and Contingencies*, of the “Notes to Consolidated Financial Statements” that appears in Part II, Item 8. “Financial Statements and Supplementary Data” of our Annual Report on Form 10-K filed with the SEC on March 1, 2023.

## 8. Lease Arrangements

We lease property in multiple facilities across the U.S. (including the Dunkirk Facility in upstate New York) and Italy, including facilities located in El Segundo, CA, which are leased from related parties. Substantially all of our operating lease right-of-use assets and operating lease liabilities relate to facilities leases. All of our finance leases are related to equipment rental at the Dunkirk Facility. See [Note 10, Related-Party Agreements](#), for additional information about our related-party leases.

Our leases generally have initial terms ranging from two to ten years and often include one or more options to renew. These renewal terms can extend the lease term from one to ten years, and are included in the lease term when it is reasonably certain that we will exercise the option.

Supplemental balance sheet information related to our leases is as follows (in thousands):

	Classification	March 31, 2023 (Unaudited)	December 31, 2022
<b>Assets</b>			
Operating lease assets	Operating lease right-of-use assets	\$ 44,191	\$ 45,788
Finance lease assets	Other assets	115	135
Total lease assets		<u>\$ 44,306</u>	<u>\$ 45,923</u>
<b>Liabilities</b>			
Current:			
Operating lease liabilities	Operating lease liabilities	\$ 2,844	\$ 2,650
Finance lease liabilities	Accrued expenses and other liabilities	79	77
Noncurrent:			
Operating lease liabilities	Operating lease liabilities, less current portion	46,289	47,951
Finance lease liabilities	Other liabilities	43	64
Total lease liabilities		<u>\$ 49,255</u>	<u>\$ 50,742</u>

Information regarding our lease terms is as follows:

	March 31, 2023 (Unaudited)	December 31, 2022
Weighted-average remaining lease term:		
Operating leases	6.4 years	6.6 years
Finance leases	1.5 years	1.8 years
Weighted-average discount rate:		
Operating leases	10.6 %	10.5 %
Finance leases	11.7 %	11.7 %

The components of lease expense consist of the following (in thousands):

	Three Months Ended March 31,	
	2023	2022
	(Unaudited)	
Operating lease costs	\$ 2,921	\$ 2,308
Short-term lease costs	1,050	—
Finance lease costs (including amortization and interest costs)	23	—
Variable lease costs	970	1,182
Total lease costs	<u>\$ 4,964</u>	<u>\$ 3,490</u>

Cash paid for amounts included in the measurement of lease liabilities is as follows (in thousands):

	Three Months Ended March 31,	
	2023	2022
	(Unaudited)	
Cash paid for operating leases (excluding variable lease costs)	\$ 3,179	\$ 2,151
Financing cash flow from finance leases	19	—
Operating cash flow from finance leases	4	—

Future minimum lease payments as of March 31, 2023, including \$14.8 million related to options to extend lease terms that are reasonably certain of being exercised, are presented in the following table (in thousands). Common area maintenance costs and taxes are not included in these payments.

Years ending December 31:	Operating Leases	Finance Leases	Total
2023 (excluding the three months ended March 31, 2023)	\$ 6,748	\$ 66	\$ 6,814
2024	12,119	66	12,185
2025	12,145	—	12,145
2026	10,290	—	10,290
2027	8,209	—	8,209
Thereafter	23,247	—	23,247
Total future minimum lease payments	72,758	132	72,890
Less: Interest	20,684	10	20,694
Less: Tenant improvement allowance receivable	2,941	—	2,941
Present value of lease liabilities	\$ 49,133	\$ 122	\$ 49,255

There have been no other material changes related to our existing lease agreements from those disclosed in Note 8, *Lease Arrangements*, of the Notes to Consolidated Financial Statements of our Annual Report on Form 10-K filed with the SEC on March 1, 2023.

## 9. Related-Party Debt

### *Related-Party Convertible Note at Fair Value*

On March 31, 2023, the company executed a \$30.0 million promissory note with Nant Capital, LLC (Nant Capital), an affiliated entity under common control of our Executive Chairman, Global Chief Scientific and Medical Officer, and principal stockholder. This note bears interest at Term Secured Overnight Financing Rate (SOFR) plus 8.0% per annum. The outstanding principal amount and any accrued and unpaid interest are due on December 31, 2023 or upon the occurrence and continuation of an Event of Default (as defined in the note). The interest on this note will be paid on a quarterly basis beginning on June 30, 2023. The company may prepay the outstanding promissory note, at any time, in whole or in part, without penalty. The noteholder may convert the balance of the convertible promissory note and accrued interest in whole at its option following the Conversion Price Date, which is the trading day prior to the opening of the next open trading window, as determined by the company's board of directors in accordance with the company's Insider Trading Policy. The conversion price is equal to the greater of (i) the NASDAQ Official Closing Price and (ii) the consolidated closing bid price of the company's common stock on the Conversion Price Date. There is no floor on the conversion price for this convertible note, therefore, as of March 31, 2023 we cannot determine the total number of shares issuable upon conversion that may occur in the future.

The company received net proceeds of \$29.9 million from this financing, net of a \$0.1 million origination fee paid to the lender. The note is accounted for under ASC 825-10-15-4 FVO election. Under the FVO election, the note is initially measured at its issue-date estimated fair value and subsequently remeasured at estimated fair value on a recurring basis at each reporting period date. With each such remeasurement, the note will be adjusted to fair value, with the change in fair value recognized in *other income (expense), net*, on the condensed consolidated statement of operations, except that the change in the fair value resulting from a change in the instrument-specific credit risks are recognized as a component of other comprehensive income. As of March 31, 2023, we had a balance of \$29.9 million in a *related-party convertible note at fair value*, on the condensed consolidated balance sheets related to the convertible promissory note measured at fair value.

### *Related-Party Convertible Notes*

On August 31, 2022, the company amended and restated an aggregate of \$315.1 million (including outstanding principal and accrued and unpaid interest) of fixed-rate promissory notes held by entities affiliated with Dr. Soon-Shiong. Prior to the amendments and restatements, these notes bore and continue to bear interest at a per annum rate ranging from 3.0% to 6.0%, provide that the outstanding principal was and continues to be due and payable on September 30, 2025, and accrued and unpaid interest was or continues to be payable either upon maturity or, with respect to one of the notes, on a quarterly basis. Prior to the amendments and restatements, the company could and can continue to prepay the outstanding principal (together with accrued and unpaid interest), either in whole or in part, at any time without premium or penalty and without the prior consent of the lender, now subject to an advance notice period of at least five business days during which the lender can convert the amount requested to be prepaid by the company into shares of the company's common stock, as part of the amendment and restatement.

The terms of these fixed-rate promissory notes were amended and restated to include a conversion feature that gives each lender, at its sole option, at any time (other than when the lender is in receipt of a written notice of prepayment from the borrower), the right to convert the entire outstanding principal amount and accrued and unpaid interest due under each note at the time of conversion into shares of the company's common stock at a price of \$5.67 per share. Upon receipt of a written notice of prepayment from the borrower, the lender has the right, at its option, to convert the outstanding principal amount to be prepaid and the accrued and unpaid interest thereon (as specified in the notice of prepayment) into shares of the company's common stock at a price of \$5.67 per share. No other material terms or conditions of these fixed-rate promissory notes were modified as part of the August 31, 2022 amendments and restatements.

As of March 31, 2023 and December 31, 2022, the carrying value of the fixed-rated convertible promissory notes of \$245.6 million and \$241.3 million, respectively, was recorded in *related-party convertible notes and accrued interest, net of discount*, on the condensed consolidated balance sheets. During the three months ended March 31, 2023 and 2022, the company made interest payments of \$0.6 million and \$0.6 million, respectively, related to our \$40.0 million promissory note.

### *Related-Party Nonconvertible Notes*

As of March 31, 2023, the company had a promissory note outstanding with Nant Capital for \$300.0 million in principal and a carrying balance of \$272.2 million, net of unamortized discount of \$27.8 million. The note bears an interest rate of Term SOFR plus 8.0% per annum, payable on a quarterly basis. In the event of a default on the loan (as defined in both the original and amended and restated promissory notes), including if the company does not repay the loan at maturity, the company had and continues to have the right, at its sole option, to convert the outstanding principal amount and accrued and unpaid interest due under this note into fully paid and non-assessable shares of the company's common stock at a conversion price per share equal to \$5.67. The company made interest payments of \$9.4 million and \$4.4 million during the three months ended March 31, 2023 and 2022, respectively.

As of March 31, 2023, the company had a promissory note outstanding with Nant Capital for \$125.0 million in principal and a carrying balance of \$119.6 million, net of unamortized discount of \$5.4 million. The note bears an interest rate of Term SOFR plus 8.0% per annum, payable on a quarterly basis. The company may prepay the outstanding promissory note, at any time, in whole or in part, without penalty. The company made an interest payment of \$3.9 million during three months ended March 31, 2023.

As of March 31, 2023, the company had a promissory note outstanding with Nant Capital for \$50.0 million in principal and a carrying balance of \$49.8 million, net of unamortized discount of \$0.2 million. The note bears an interest rate of Term SOFR plus 8.0% per annum, payable on a quarterly basis. The company may prepay the outstanding promissory note, at any time, in whole or in part, without penalty. In the event of a Specified Transaction (as defined in the loan agreement), the noteholder can request the outstanding principal and interest due on the loan be repaid in full upon consummation of such Specified Transaction. The company made a cash payment of \$1.6 million during three months ended March 31, 2023.

Our related-party debt is summarized below (in thousands):

Balances at March 31, 2023						
Maturity Year	Interest Rate	Principal Amount	Accrued Interest Added to Note	Less: Unamortized Discounts	Total	
(Unaudited)						
<i>Related-Party Nonconvertible Notes:</i>						
Nant Capital (1)	2023	Term SOFR + 8.0%	\$ 475,000	\$ —	\$ 33,372	\$ 441,628
<i>Related-Party Convertible Note at Fair Value:</i>						
Nant Capital (1)	2023	Term SOFR + 8.0%	30,000	—	—	29,850
<i>Related-Party Convertible Notes:</i>						
Nant Capital	2025	5.0%	55,226	10,113	4,742	60,597
Nant Capital	2025	6.0%	50,000	7,870	3,696	54,174
Nant Capital	2025	6.0%	40,000	—	2,373	37,627
NantMobile, LLC	2025	3.0%	55,000	5,554	5,482	55,072
NantCancerStemCell, LLC (NCSC)	2025	5.0%	33,000	8,176	3,006	38,170
Total related-party convertible notes			233,226	31,713	19,299	245,640
Total related-party debt			\$ 738,226	\$ 31,713	\$ 52,671	\$ 717,118

(1) The interest rate on our related-party variable-rate notes as of March 31, 2023 was 12.89%.

Balances at December 31, 2022						
Maturity Year	Interest Rate	Principal Amount	Accrued Interest Added to Note	Less: Unamortized Discounts	Total	
<i>Related-Party Nonconvertible Notes:</i>						
Nant Capital (1)	2022	Term SOFR + 8.0%	\$ 475,000	\$ —	\$ 43,099	\$ 431,901
<i>Related-Party Convertible Notes:</i>						
Nant Capital	2025	5.0%	55,226	9,320	5,188	59,358
Nant Capital	2025	6.0%	50,000	7,039	4,068	52,971
Nant Capital	2025	6.0%	40,000	—	2,580	37,420
NantMobile	2025	3.0%	55,000	5,110	5,978	54,132
NCSC	2025	5.0%	33,000	7,684	3,294	37,390
Total related-party convertible notes			233,226	29,153	21,108	241,271
Total related-party debt			\$ 708,226	\$ 29,153	\$ 64,207	\$ 673,172

(1) The interest rate on our related-party variable-rate notes as of December 31, 2022 was 12.59%.

The following table summarizes the estimated future contractual obligations for our related-party debt as of March 31, 2023 (unaudited; in thousands):

	Principal Payments		Interest Payments (1)		Total
	Convertible Notes	Non-convertible Notes	Convertible Notes	Non-convertible Notes	
2023 (excluding the three months ended March 31, 2023)	\$ 30,000	\$ 475,000	\$ 4,724	\$ 46,131	\$ 555,855
2024	—	—	2,407	—	2,407
2025	233,226	—	61,050	—	294,276
Total principal and estimated interest due on related-party debt	\$ 263,226	\$ 475,000	\$ 68,181	\$ 46,131	\$ 852,538

(1) Interest payments on our fixed-rate convertible notes are calculated based on contractual interest rates and scheduled maturity dates. Interest payments on our variable-rate notes are calculated based on Term SOFR plus the contractual spread per the loan agreements. The rate on our variable-rate notes as of March 31, 2023 was 12.89%.

## 10. Related-Party Agreements

We conduct business with several affiliates under written agreements and informal arrangements. Below is a summary of outstanding balances and a description of significant relationships (in thousands):

	March 31, 2023 (Unaudited)	December 31, 2022
Due from related party—NantBio, Inc.	\$ 1,294	\$ 1,294
Due from related party—Brink Biologics	35	271
Due from related parties—Various	135	325
Total due from related parties	\$ 1,464	\$ 1,890
Due to related party—Duley Road, LLC	\$ 1,356	\$ 1,431
Due to related party—NantBio, Inc.	943	943
Due to related party—NantWorks	592	986
Due to related party—Immuno-Oncology Clinic, Inc.	41	109
Total due to related parties	\$ 2,932	\$ 3,469

Our Executive Chairman, Global Chief Scientific and Medical Officer, and principal stockholder founded and has a controlling interest in NantWorks, which is a collection of companies in the healthcare and technology space. As described below, we have entered into arrangements with NantWorks, and certain affiliates of NantWorks, to facilitate the development of new immunotherapies for our product pipeline. Affiliates of NantWorks are also affiliates of the company due to the common control by and/or common ownership interest of our Executive Chairman, Global Chief Scientific and Medical Officer, and principal stockholder.



## **NantWorks, LLC**

### *Shared Services Agreement*

Under the amended and restated shared services agreement with NantWorks dated as of June 2016, but effective as of August 2015, NantWorks, a related party, provides corporate, general and administrative, certain research and development, and other support services. We are charged for the services at cost plus reasonable allocations of employee benefits, facilities, and other direct or fairly allocated indirect costs that relate to the employees providing the services. For the three months ended March 31, 2023 and 2022, we recorded \$1.0 million and \$1.3 million, respectively, in *selling, general and administrative expense*, and \$0.4 million of expense reimbursements and an immaterial amount, respectively, under this arrangement in *research and development expense*, on the condensed consolidated statements of operations. These amounts exclude certain general and administrative expenses provided by third-party vendors directly for our benefit, which were reimbursed to NantWorks based on those vendors' invoiced amounts without markup by NantWorks.

As of March 31, 2023 and December 31, 2022, we owed NantWorks net amounts of \$0.6 million and \$1.0 million, respectively, for all agreements between the two affiliates, which are included in *due to related parties*, on the condensed consolidated balance sheets. We also recorded \$2.1 million and \$2.0 million of prepaid expenses for services that have been passed through to the company from NantWorks as of March 31, 2023 and December 31, 2022, respectively, which are included in *prepaid expenses and other current assets*, on the condensed consolidated balance sheets.

### *Facility License Agreement*

In 2015, we entered into a facility license agreement with NantWorks for approximately 9,500 rentable square feet of office space in Culver City, California, which was converted to a research and development laboratory and a cGMP manufacturing facility. In 2020, we amended this agreement to extend the term of this license agreement through December 31, 2021. Commencing on January 1, 2022, the license fee increased by 3% to approximately \$56,120 per month.

On May 6, 2022, we amended our facility license agreement with NantWorks to expand the licensed premises by 36,830 rentable square feet to an aggregate total of 46,330 rentable square feet. Effective May 1, 2022, the license fee is approximately \$273,700 per month, which is subject to a 3% increase commencing on January 1 of each year. The space continues to be rented on a month-to-month basis, which can be terminated by either party with at least 30 days' prior written notice to the other party. We recorded license fee expense for this facility totaling \$0.8 million and \$0.2 million for the three months ended March 31, 2023 and 2022, respectively, in *research and development expense*, on the condensed consolidated statements of operations.

## **Immuno-Oncology Clinic, Inc.**

We entered into multiple agreements with Immuno-Oncology Clinic, Inc. (the Clinic) to conduct clinical trials related to certain of our product candidates. The Clinic is a related party as it is owned by an officer of the company and NantWorks manages the administrative operations of the Clinic. Pursuant to the terms of the Clinic agreement (as amended), we made payments totaling \$5.6 million in consideration of future services to be performed by the Clinic.

In 2021, we completed a review of alternative structures that could support our more complex clinical trial requirements and made a decision to explore a potential transition of clinical trials at the Clinic to a new structure (including contracting with a new, non-affiliated professional corporation) to be determined and agreed upon by all parties. Based on this decision to explore a potential transition, we determined that it was more likely than not that the previously recorded prepaid asset would not result in the collection of fees for services performed by the Clinic as contemplated in the original agreements. As a result, we wrote down the remaining value of our prepaid asset and recorded approximately \$4.4 million in *research and development expense*, on the condensed consolidated statement of operations for the year ended December 31, 2021. We continue productive negotiations with potential partners around alternative structures, but there can be no assurance that we will be successful.

We recorded \$0.6 million and \$0.4 million for the three months ended March 31, 2023 and 2022, respectively, in *research and development expense*, on the condensed consolidated statements of operations related to clinical trial and transition services provided by the Clinic. As of March 31, 2023 and December 31, 2022, we owed the Clinic an immaterial amount and \$0.1 million, respectively.

**NantBio, Inc.**

In August 2018, we entered into a supply agreement with NCSC, a 60% owned subsidiary of NantBio (with the other 40% owned by Sorrento). Under this agreement, we agreed to supply VivaBioCell's proprietary GMP-in-a-Box bioreactors and related consumables, made according to specifications mutually agreed to with both companies. The agreement has an initial term of five years and renews automatically for successive one-year terms unless terminated by either party in the event of material default upon prior written notice of such default and the failure of the defaulting party to remedy the default within 30 days of the delivery of such notice, or upon 90 days' prior written notice by NCSC. We recognized no revenue for the three months ended March 31, 2023 and no revenue for the three months ended March 31, 2022. We recorded \$0.1 million and \$0.1 million of deferred revenue for bioreactors that were delivered but not installed in *accrued expenses and other liabilities*, on the condensed consolidated balance sheets as of March 31, 2023 and December 31, 2022, respectively. As of March 31, 2023 and December 31, 2022, we recorded \$0.9 million in *due to related parties*, on the condensed consolidated balance sheets related to this agreement.

In 2018, we entered into a shared service agreement pursuant to which we are charged for services at cost, without mark-up or profit by NantBio, but including reasonable allocations of employee benefits that relate to the employees providing the services. In April 2019, we agreed with NantBio to transfer certain NantBio employees and associated research and development projects to the company. As of March 31, 2023 and December 31, 2022, we recorded a net receivable from NantBio of \$1.3 million for amounts we paid on behalf of NantBio during the year ended December 31, 2019.

**605 Doug St, LLC**

In September 2016, we entered into a lease agreement with 605 Doug St, LLC, an entity owned by our Executive Chairman and Global Chief Scientific and Medical Officer, for approximately 24,250 rentable square feet in El Segundo, California, which has been converted to a research and development laboratory and a cGMP manufacturing facility. The lease runs from July 2016 through July 2023. We have the option to extend the lease for one additional three-year term through July 2026. The base rent is approximately \$72,385 per month, with annual increases of 3% that began in July 2017. We recorded lease expense for this facility of \$0.2 million and \$0.2 million for the three months ended March 31, 2023 and 2022, respectively, in *research and development expense*, on the condensed consolidated statements of operations.

**Duley Road, LLC**

In February 2017, we entered into a lease agreement with Duley Road, a related party that is indirectly controlled by our Executive Chairman and Global Chief Scientific and Medical Officer, for approximately 11,980 rentable square feet of office and cGMP manufacturing facility space in El Segundo, California. The lease term is from February 2017 through October 2024. We have the option to extend the initial term for two consecutive five-year periods through October 2034. The base rent is approximately \$40,700 per month, with annual increases of 3%.

Effective in January 2019, we entered into two lease agreements with Duley Road for a second building located in El Segundo, California. The first lease is for the first floor of the building with approximately 5,650 rentable square feet. The lease has a seven-year term commencing in September 2019. The second lease is for the second floor of the building with approximately 6,488 rentable square feet. The lease has a seven-year term commencing in July 2019. Both floors of the building are used for research and development and office space. We have options to extend the initial terms of both leases for two consecutive five-year periods through 2036. The base rent for the two leases is approximately \$35,800 per month, with annual increases of 3%.

As of March 31, 2023 and December 31, 2022, respectively, we recorded \$0.9 million and \$0.9 million of leasehold improvement payables, and \$0.5 million and \$0.6 million of lease-related payables, to Duley Road, which were included in *due to related parties*, on the condensed consolidated balance sheets. We recorded rent expense for these leases totaling \$0.2 million and \$0.2 million for the three months ended March 31, 2023 and 2022, respectively, in *research and development expense*, on the condensed consolidated statements of operations.

### **605 Nash, LLC**

In February 2021, but effective on January 1, 2021, we entered into a lease agreement with 605 Nash, a related party, whereby we leased approximately 6,883 rentable square feet (the Initial Premises) in a two story mixed use building containing approximately 64,643 rentable square feet on 605-607 Nash Street in El Segundo, California. This facility is used primarily for pharmaceutical development and manufacturing purposes. The lease term commenced in January 2021 and expires in December 2027, and includes an option to extend the lease for one three-year term through December 2030. The base rent is approximately \$20,300 per month with an annual increase of 3% on January 1 of each year during the initial term and, if applicable, during the option term. In addition, under the agreement, we are required to pay our share of estimated property taxes and operating expenses. We received a rent abatement for the first seven months. The lease also provides a tenant improvement incentive of \$0.3 million for costs and expenses associated with the construction of tenant improvements for the Initial Premises.

In May 2021, but effective on April 1, 2021, we entered into an amendment to our Initial Premises lease with 605 Nash. The amendment expanded the leased square feet by approximately 57,760 rentable square feet (the Expansion Premises). The lease term of the Expansion Premises commenced in April 2021 and expires in March 2028, whereby the company has the option to extend the initial term for three years. Per the terms of the amendment, the term of the Initial Premises lease was extended for an additional three months and now expires on March 31, 2028. Base rent for the Expansion Premises is approximately \$170,400 per month with annual increases of 3% on April 1 of each year. We are responsible for the build out of the facility space and associated costs. We received a rent abatement for the first seven months. The amended lease provides for a tenant improvement allowance of approximately \$2.6 million for costs and expenses related to improvements made by us to the Expansion Premises.

We recorded rent expense for the Initial and Expansion Premises leases totaling \$0.5 million and \$0.5 million for the three months ended March 31, 2023 and 2022, respectively, in *research and development expense*, on the condensed consolidated statements of operations.

### **420 Nash, LLC**

On September 27, 2021, we entered into a lease agreement with 420 Nash, LLC, a related party, whereby we leased an approximately 19,125 rentable square foot property located at 420 Nash Street, El Segundo, California, to be used primarily for the warehousing and storage of drug manufacturing supplies, products and equipment and ancillary office space.

Under the terms of the lease agreement, the lease term began on October 1, 2021 and expires on September 30, 2026. The base rent is approximately \$38,250 per month with an annual increase of 3% on October 1 of each year beginning in 2022 during the initial term. The company is responsible for the payment of real property taxes, repairs and maintenance, improvements, insurance and operating expenses during the term of the lease.

The company has options to extend the lease term for two additional consecutive periods of five years each. At the beginning of each option term, the initial monthly base rent will be adjusted to market rent (as defined in the lease agreement) with an annual increase of 3% during the option term. We have included the first option to extend the lease term for five years as part of the initial term of the lease as it is reasonably certain that we will exercise the option, which implies lease expiration in September 2031. We recorded \$0.1 million and \$0.1 million of rent expense related to this lease for the three months ended March 31, 2023 and 2022, respectively, in *research and development expense*, on the condensed consolidated statements of operations.

### **23 Alaska, LLC**

On May 6, 2022, we entered into a lease agreement with 23 Alaska, LLC, a related party, for a 47,265 rentable square foot facility located at 2335 Alaska Ave., El Segundo, California, to be used primarily for pharmaceutical development and manufacturing, research and development, and office space.

Under the terms of the agreement, the lease term begins on May 1, 2022 and expires on April 30, 2027. The base rent is approximately \$139,400 per month with an annual increase of 3% on May 1 of each year beginning in 2023 during the initial term. We are also required to pay \$7,600 per month for parking during the initial term and extension term, if exercised. The company is responsible for the payment of real property taxes, repairs and maintenance, improvements, insurance, and operating expenses during the term of the lease.

The company has an option to extend the lease term for one additional consecutive five-year period. At the beginning of the option term, the initial monthly base rent will be adjusted to market rent (as defined in the lease agreement) with an annual increase of 3% during the option term. We recorded \$0.4 million of rent expense for this lease for the three months ended March 31, 2023 in *research and development expense*, on the condensed consolidated statement of operations.

## **11. Warrant Liabilities**

### ***December 2022 Warrants***

On December 12, 2022, in connection with the sale of 9,090,909 shares of our common stock to an institutional investor, we entered into a warrant agreement that allows such investor to purchase up to 9,090,909 shares at an exercise price of \$6.60 per share. We classified the warrants as a liability at their fair value determined using the Black-Scholes option pricing model. The fair value of the warrants was estimated at \$35.1 million at the issuance date. Of the total placement agent fees and other offering costs of \$3.0 million, \$1.1 million were allocated to the warrants and recorded to *other income (expense), net* on the date of the transaction.

As of March 31, 2023, all 9,090,909 underlying warrants were outstanding. As of March 31, 2023 and December 31, 2022, the estimated fair value of the warrants were \$5.8 million and \$21.6 million, respectively. The decrease in fair value of \$15.8 million was recognized in *other income (expense), net*, on the condensed consolidated statement of operations for the three months ended March 31, 2023.

### ***February 2023 Warrants***

On February 15, 2023, in connection with the sale of 14,072,615 shares of our common stock to institutional investors, we entered into a warrant agreement that allows such investors to purchase up to 14,072,615 shares at an exercise price of \$4.26 per share.

We classified the warrants as a liability at their fair value determined using the Black-Scholes option pricing model. The fair value of warrants were estimated at \$23.7 million at the issuance date. Of the total placement agent fees and other offering costs of \$3.0 million, \$1.0 million were allocated to the warrants and recorded to *other income (expense), net*, on the date of the transaction. As of March 31, 2023, all 14,072,615 underlying warrants were outstanding, with an estimated fair value of \$12.0 million. The decrease in fair value of \$11.7 million is recognized in *other income (expense), net*, on the condensed consolidated statement of operations for the three months ended March 31, 2023.

## **12. Stockholders' Deficit**

### ***Stock Repurchases***

No shares of our common stock were repurchased during the three months ended March 31, 2023 and 2022 under the company's 2015 Share Repurchase Program. As of March 31, 2023, \$18.3 million remained authorized to use for share repurchases under the program.

### ***Shelf Registration Statement***

During February 2023, we filed a \$750.0 million shelf registration statement with the SEC on Form S-3 for the offering and sale of equity and equity-linked securities, including common stock, preferred stock, debt securities, depositary shares, warrants to purchase common stock, preferred stock or debt securities, subscription rights, purchase contracts, and units. In February 2023, we sold shares of our common stock and warrants valued at \$110.0 million under the shelf. As of March 31, 2023, we had \$640.0 million available for use under the shelf. See "*Registered Direct Offerings*" below. This available shelf is in addition to the Open Market Sale Agreement described below.

### **Open Market Sale Agreement**

In April 2021, we entered into the Sale Agreement with respect to an ATM offering program under which we may offer and sell, from time to time at our sole discretion, shares of our common stock through our sales agent. We pay our sales agent a commission of up to 3.0% of the gross sales proceeds of any shares of our common stock sold through them under the Sale Agreement, and also have provided them with customary indemnification and contribution rights. We issued no shares under the ATM during the three months ended March 31, 2023. As of March 31, 2023, we had \$225.4 million available for future stock issuances under the ATM.

We are not obligated to sell any shares and may at any time suspend solicitation and offers under the Sale Agreement. The Sale Agreement may be terminated by us at any time given written notice to the sales agent for any reason or by the sales agent at any time by giving written notice to us for any reason or immediately under certain circumstances, and shall automatically terminate upon the issuance and sale of all of the shares.

### **Registered Direct Offerings**

On December 12, 2022, we entered into a securities purchase agreement with an institutional investor for the sale of 9,090,909 shares of our common stock, as well as warrants that allow such investor to purchase an additional 9,090,909 shares of common stock at an exercise price of \$6.60 per share, for a purchase price of \$5.50 per share and accompanying warrant, generating net proceeds of approximately \$47.0 million, after deducting placement agent fees and other offering costs of \$3.0 million, of which \$1.9 million was allocated to the sale of our common stock and recognized as *additional-paid-in capital*, on the consolidated statement of stockholders' deficit, for the year ended December 31, 2022. The warrants became immediately exercisable and expire two years after the initial issuance date.

On February 15, 2023, we entered into a securities purchase agreement with certain institutional investors for the sale of 14,072,615 shares of our common stock, as well as warrants that allow such investors to purchase an additional 14,072,615 shares of common stock at an exercise price of \$4.26 per share, for an aggregate purchase price of \$3.55 per share and accompanying warrant. This transaction generated net proceeds of approximately \$47.0 million, after deducting placement agent fees and other estimated offering costs of \$3.0 million, of which \$2.0 million was allocated to the sale of our common stock and recognized in *additional-paid-in capital*, on the condensed consolidated statement of stockholders' deficit for the three months ended March 31, 2023. The warrants became immediately exercisable and expire two years after the initial issuance date. The closing of the offering occurred on February 17, 2023.

We currently intend to use the net proceeds from this offering, together with other available funds, to progress our pre-commercialization efforts and clinical development programs, fund other research and development activities, for capital expenditures, and for other general corporate purposes. We may also use a portion of the net proceeds to license intellectual property or to make acquisitions or investments. See [Note 11](#), *Warrant Liabilities*, for further information.

### 13. Stock-Based Compensation

#### 2015 Equity Incentive Plan

As of March 31, 2023, approximately 18.6 million shares were available for future grants under the 2015 Plan.

#### Stock-Based Compensation

The following table presents stock-based compensation included on the condensed consolidated statements of operations (in thousands):

	Three Months Ended March 31,	
	2023	2022
	(Unaudited)	
Stock-based compensation expense:		
Stock options	\$ 3,643	\$ 2,022
RSUs	7,235	8,002
	<u>\$ 10,878</u>	<u>\$ 10,024</u>
Stock-based compensation expense in operating expenses:		
Research and development	\$ 3,634	\$ 2,985
Selling, general and administrative	7,244	7,039
	<u>\$ 10,878</u>	<u>\$ 10,024</u>

#### Stock Options

The following table summarizes stock option activity and related information for the three months ended March 31, 2023:

	Number of Options	Weighted- Average Exercise Price	Aggregate Intrinsic Value (in thousands)	Weighted- Average Remaining Contractual Life (in years)
Outstanding at December 31, 2022	9,262,926	\$ 9.87	\$ 4,848	7.2
Granted	—	\$ —		
Exercised	(81,037)	\$ 1.55		
Forfeited/expired	(22,224)	\$ 5.83		
Outstanding at March 31, 2023	<u>9,159,665</u>	\$ 9.96	\$ 234	7.0
Vested and exercisable at March 31, 2023	<u>5,053,597</u>	\$ 12.93	\$ 234	5.3

As of March 31, 2023, the unrecognized compensation cost related to outstanding stock options was \$16.7 million, which is expected to be recognized over a remaining weighted-average period of 1.6 years.

The total intrinsic value of stock options exercised during the three months ended March 31, 2023 was \$0.2 million. Cash proceeds received from stock option exercises during the three months ended March 31, 2023 and 2022 totaled \$0.1 million and \$0.1 million, respectively.

As of December 31, 2022, a total of 3,445,499 vested and exercisable shares were outstanding.

### Restricted Stock Units

The following table summarizes RSU activity during the three months ended March 31, 2023:

	Number of Units	Weighted- Average Grant Date Fair Value
Nonvested balance at December 31, 2022	6,551,388	\$ 18.27
Granted	202,985	\$ 1.43
Vested	(313,975)	\$ 15.17
Forfeited/canceled	(252,106)	\$ 4.38
Nonvested balance at March 31, 2023	<u>6,188,292</u>	<u>\$ 18.45</u>

As of March 31, 2023, there was \$61.9 million of unrecognized stock-based compensation expense related to RSUs that is expected to be recognized over a weighted-average period of 2.6 years. The total intrinsic value of RSUs vested during the three months ended March 31, 2023 was \$0.9 million.

RSUs awarded to employees and consultants of affiliated companies are accounted for as stock-based compensation in accordance with ASU 2018-07, *Compensation—Stock Compensation (Topic 718)*, as the compensation was in exchange for continued support or services expected to be provided to the company over the vesting periods under the NantWorks shared services agreement discussed in [Note 10, Related-Party Agreements](#). We have evaluated the associated benefit of these awards to the affiliated companies under common control and determined that the benefit is limited to the retention of their employees. We estimated such benefit at the grant date fair value of \$4.0 million on March 4, 2021 and recorded \$0.1 million and \$0.1 million of deemed dividends for the three months ended March 31, 2023 and 2022 in *additional paid-in capital*, on the condensed consolidated balance sheets, with a corresponding credit to stock-based compensation expense.

### Related-Party Warrants

In connection with the Merger, warrants issued to NantWorks, a related party, in connection with NantCell's acquisition of Altor were assumed by the company. After applying the Exchange Ratio at the Effective Time of the Merger, a total of 1,638,000 warrants with an exercise price of \$3.24 per share were outstanding as of March 31, 2023. The fair value of \$18.0 million assigned to the warrants will be recognized in equity upon achievement of a performance-based vesting condition pertaining to building manufacturing capacity to support supply requirements for one of our product candidates.

## 14. Income Taxes

We are subject to U.S. federal income tax, as well as income tax in Italy, South Korea, California and other states. From inception through March 31, 2023, we have not been required to pay U.S. federal and state income taxes because of current and accumulated net operating losses (NOLs). The company computes its quarterly income tax provision by using a forecasted annual effective tax rate and adjusts for any discrete items arising during the quarter. No tax benefit was provided for losses incurred in the U.S., Italy, and South Korea because those losses are offset by a full valuation allowance.

Our federal returns for tax years 2019 through 2021 remain open to examination, and our state returns remain subject to examination for tax years 2018 through 2021. The Italian and South Korea returns for tax years 2017 through 2021 remain open to examination. Carryforward attributes that were generated in years where the statute of limitations is closed may still be adjusted upon examination by the Internal Revenue Service or other respective tax authorities. No income tax returns are currently under examination by taxing authorities.

***Inflation Reduction Act of 2022***

The Inflation Reduction Act 2022, which incorporates a Corporate Alternative Minimum Tax (CAMT), was signed on August 16, 2022. The changes are effective for the tax years beginning after December 31, 2022. The new tax will require companies to compute two separate calculations for federal income tax purposes and pay the greater of the new minimum tax or their regular tax liability. The company will be monitoring the impact of the act to determine if it will have an impact on the company for years beginning after December 31, 2022. We currently do not expect this act will have a material effect on our consolidated financial statements.

***Coronavirus Aid, Relief and Economic Security Act***

On March 27, 2020, the U.S. enacted the Coronavirus Aid, Relief and Economic Security Act (the CARES Act). The Cares Act is an emergency economic stimulus package that includes spending and tax breaks to strengthen the U.S. economy and fund a nationwide effort to curtail the effect of COVID-19. The CARES Act provides sweeping tax changes in response to the COVID-19 pandemic. Under the CARES Act, some of the more significant provisions are NOL carrybacks for five years to offset previous years' income, or can be carried forward indefinitely to offset 100% of taxable income for the tax year beginning before 2021 and 80% of taxable income for tax years 2021 and thereafter, increasing the ability to deduct interest expense, as well as amending certain provisions of the previously enacted Tax Cuts and Jobs Act. During the three months ended March 31, 2023 and 2022, we did not record any income tax (expense) benefit resulting from the CARES Act, mainly due to our history of net operating losses generated and the maintenance of a full valuation allowance against our net deferred tax assets. There was no material impact from the provisions of the Cares Act for the three months ended March 31, 2023 and 2022.

***State of California Assembly Bill No. 85***

On June 29, 2020, the state of California enacted Assembly Bill No. 85 (AB 85) suspending California NOL utilization and imposing a cap on the amount of business incentive tax credits companies can utilize, effective for tax years 2020, 2021 and 2022. There was no material impact from the provisions of AB 85 for the three months ended March 31, 2022. On February 9, 2022, Senate Bill No. 113 was enacted that removed the limitations on the use of NOLs and the cap on the business incentive tax credits that were suspended in accordance with AB 85 effective for tax year 2022.



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

### Forward-Looking Statements

*The following discussion and analysis should be read together with our condensed consolidated financial statements and the notes to those statements included elsewhere in this Quarterly Report on Form 10-Q. This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (Securities Act) and Section 21E of the Exchange Act that are based on our management's beliefs and assumptions and on information currently available to our management. The forward-looking statements are contained in this Management's Discussion and Analysis of Financial Condition and Results of Operations. Forward-looking statements include, but are not limited to:*

- our ability to develop next-generation therapies and vaccines that complement, harness, and amplify the immune system to defeat cancers and infectious diseases;
- our ability to obtain funding for our operations, including funding necessary to complete further development and any commercialization of our product candidates;
- our expectations regarding the potential benefits of our strategy and technology;
- our expectations regarding the operation and effectiveness of our product candidates and related benefits;
- our ability to utilize multiple modes to induce cell death;
- our beliefs regarding the benefits and perceived limitations of competing approaches, and the future of competing technologies and our industry;
- details regarding our strategic vision and planned product candidate pipeline, including that we eventually plan to advance vaccines and therapies for virally-induced infectious diseases;
- our beliefs regarding the success, cost and timing of our product candidate development activities and current and future clinical trials and studies, including study design and the enrollment of patients;
- the timing of the development and commercialization of our product candidates;
- our expectations regarding our ability to utilize the Phase 1/2 aNK and haNK<sup>®</sup> clinical trials data to support the development of our product candidates, including our haNK, taNK, t-haNK<sup>™</sup>, MSC, and M-ceNK<sup>™</sup> product candidates;
- our expectations regarding the development, application, commercialization, marketing, prospects and use generally of our product candidates, including Anktiva (N-803), self-amplifying RNA (saRNA), hAd5 and yeast constructs, recombinant sub-unit proteins, toll-like receptor-activating adjuvants, and aldoxorubicin;
- the timing or likelihood of regulatory filings or other actions and related regulatory authority responses, including any planned investigational new drug (IND), BLA or New Drug Application (NDA) filings or pursuit of accelerated regulatory approval pathways or orphan drug status and *Breakthrough Therapy* designations;
- our ability to implement and support our SARS-CoV-2 (COVID-19) vaccine and therapeutic programs;
- our ability to implement an integrated discovery ecosystem and the operation of that planned ecosystem, including being able to regularly add neoepitopes and subsequently formulate new product candidates;
- the ability and willingness of strategic collaborators to share our vision and effectively work with us to achieve our goals;
- the ability and willingness of various third parties to engage in research and development activities involving our product candidates, and our ability to leverage those activities;
- our ability to attract additional third-party collaborators;
- our expectations regarding the ease of administration associated with our product candidates;
- our expectations regarding patient compatibility associated with our product candidates;

- our beliefs regarding the potential markets for our product candidates and our ability to serve those markets;
- our expectations regarding the timing of enrollment and submission of our clinical trials, and protocols related to such trials;
- our ability to produce an antibody cytokine fusion protein, a DNA, RNA, or recombinant protein vaccine, a toll-like receptor-activating adjuvant, an NK-cell or T-cell therapy, or a damage-associated molecular patterns (DAMP) inducer therapy;
- our beliefs regarding the potential manufacturing and distribution benefits associated with our product candidates, and our ability to scale up the production of our product candidates;
- our plans regarding our manufacturing facilities and our belief that our manufacturing is capable of being conducted in-house;
- our belief in the potential of our antibody cytokine fusion proteins, DNA, RNA or recombinant protein vaccines, toll-like receptor-activating adjuvants, NK-cell therapies, or DAMP inducer platforms, and the fact that our business is based upon the success individually and collectively of these platforms;
- our belief regarding the magnitude or duration for additional clinical testing of our antibody cytokine fusion proteins, DNA, RNA or recombinant protein vaccines, toll-like receptor-activating adjuvants, NK-cell therapies, or DAMP inducers along with other product candidate families;
- even if we successfully develop and commercialize specific product candidates like our N-803 or PD-L1 t-haNK, our ability to develop and commercialize our other product candidates either alone or in combination with other therapeutic agents;
- the ability to obtain and maintain regulatory approval of any of our product candidates, and any related restrictions, limitations and/or warnings in the label of any approved product candidate;
- our ability to commercialize any approved products;
- the rate and degree of market acceptance of any approved products;
- our ability to attract and retain key personnel;
- the accuracy of our estimates regarding our future revenue, as well as our future operating expenses, capital requirements and needs for additional financing;
- our ability to obtain, maintain, protect and enforce intellectual property protection for our product candidates and technology and not infringe upon, misappropriate or otherwise violate the intellectual property of others;
- the terms and conditions of licenses granted to us and our ability to license additional intellectual property relating to our product candidates and technology;
- the impact on us, if any, if the contingent value rights (CVRs) held by former Altor BioScience Corporation (Altor) stockholders become due and payable in accordance with their terms;
- regulatory developments in the United States (U.S.) and foreign countries; and
- any impact of the coronavirus pandemic, or responses to the pandemic, on our business, clinical trials or personnel.

*Forward-looking statements include statements that are not historical facts and can be identified by terms such as “anticipates,” “believes,” “could,” “seeks,” “estimates,” “expects,” “intends,” “may,” “plans,” “potential,” “predicts,” “projects,” “should,” “will,” “would,” or similar expressions and the negatives of those terms. In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Quarterly Report on Form 10-Q, and although we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted a thorough inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and investors are cautioned not to unduly rely upon these statements.*

Forward-looking statements involve known and unknown risks, uncertainties, and other factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. We discuss these risks in greater detail in [Part II, Item 1A. “Risk Factors”](#) of this Quarterly Report on Form 10-Q. Given these uncertainties, you should not place undue reliance on these forward-looking statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame. Also, forward-looking statements represent our management’s beliefs and assumptions only as of the date of this Quarterly Report on Form 10-Q.

Except as required by law, we assume no obligation to update these forward-looking statements, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future. You should read this Quarterly Report on Form 10-Q completely and with the understanding that our actual future results may be materially different from what we expect.

Anktiva, ceNK, Conkwest, GlobeImmune, GlobeImmune (logo), haNK, haNK (Chinese characters), ImmunityBio, NantKwest, NK-92, Outsmart your disease, taNK, Tarmogen, VesAnktiva, and VivaBioCell are trademarks or registered trademarks of ImmunityBio, Inc., its subsidiaries, or its affiliates.

Our product candidates, including N-803, are investigational. Safety and efficacy have not been established by any agency, including the U.S. Food and Drug Administration (FDA).

This Quarterly Report on Form 10-Q contains references to our trademarks and trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this Quarterly Report on Form 10-Q, including logos, artwork and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other companies’ trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us, by any other companies.

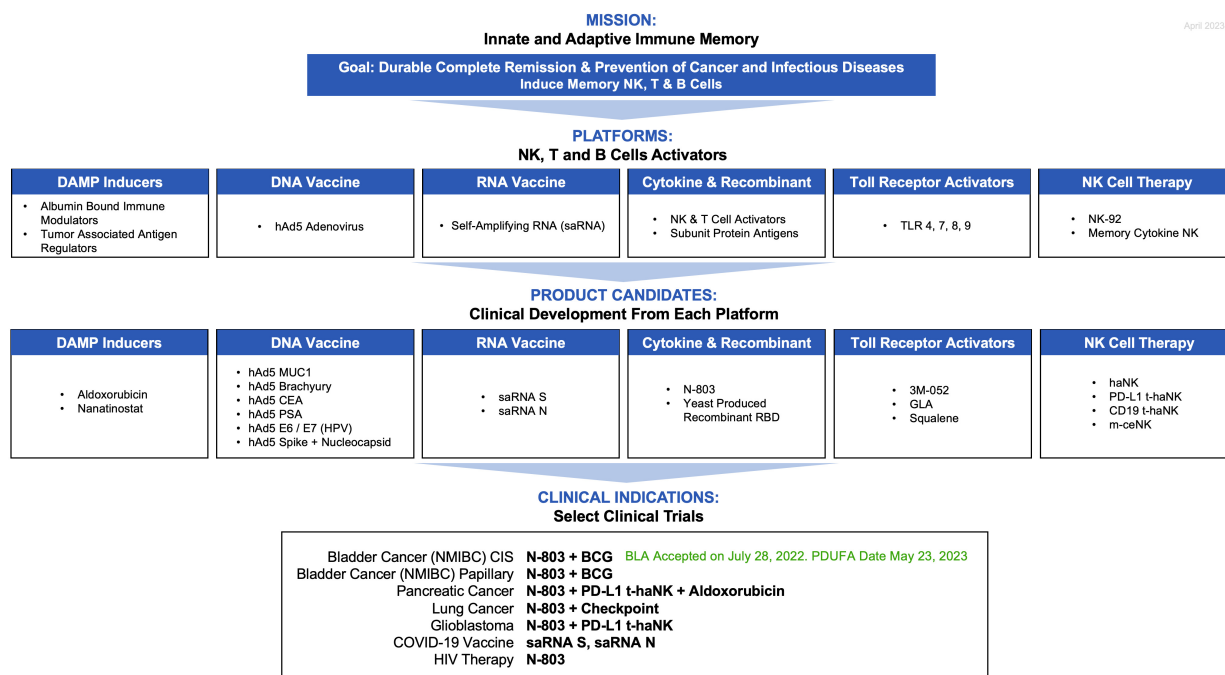
In this Quarterly Report on Form 10-Q, “ImmunityBio,” “the company,” “we,” “us,” and “our” refer to ImmunityBio, Inc. and its subsidiaries.

## **Our Business**

ImmunityBio, Inc. is a clinical-stage biotechnology company developing next-generation therapies and vaccines that complement, harness, and amplify the immune system to defeat cancers and infectious diseases. We strive to be a vertically-integrated immunotherapy company designing and manufacturing our products so they are more effective, accessible, more conveniently stored, and more easily administered to patients.

Our broad immunotherapy and cell therapy platforms are designed to attack cancer and infectious pathogens by activating both the innate immune system—natural killer (NK) cells, dendritic cells, and macrophages—and the adaptive immune system—B cells and T cells—in an orchestrated manner. The goal of this potentially best-in-class approach is to generate immunogenic cell death thereby eliminating rogue cells from the body whether they are cancerous or virally infected. Our ultimate goal is to employ this approach to establish an “immunological memory” that confers long-term benefit for the patient.

Our business is based on the foundation of multiple platforms that collectively act on the entire immune response with the goal of targeted, durable, coordinated, and safe immunity against disease. These platforms and their associated product candidates are designed to overcome the limitations of the current standards of care in oncology and infectious diseases, such as checkpoint inhibitors and antiretroviral therapies. Our portfolio includes:



Our platforms include 13 novel therapeutic agents either in clinical trials or for which we are developing protocols. We are currently engaged in 15 active clinical trials involving 10 of these agents. Seven of these trials are being sponsored by ImmunityBio while the remaining eight are investigator-led studies. Twelve of these trials are in Phase 2 or 3 development across eleven indications in liquid and solid tumors. These include bladder, pancreatic, and lung cancers, which are among the most frequent and lethal cancer types, and where there are high failure rates for existing standards of care or no available effective treatment. In infectious diseases, our pipeline currently targets such pathogens as the novel strain of the coronavirus (SARS-CoV-2) and human immunodeficiency virus (HIV). We believe SARS-CoV-2 currently lacks a vaccine that provides long-term protection against the virus, particularly its variants, while HIV affects tens of millions of people globally and currently has no known cure.

We believe that our innovative approach to orchestrate and combine therapies for optimal immune system response will become a therapeutic foundation across multiple indications. Additionally, we believe that data from multiple clinical trials indicates N-803 has broad potential to enhance the activity of therapeutic monoclonal antibodies (mAbs), including checkpoint inhibitors (e.g., Keytruda), across a wide range of tumor types. N-803 is currently being studied in 14 clinical trials (both ImmunityBio and investigator-led) across 11 indications. Although such designations may not lead to a faster development process or regulatory review and may not increase the likelihood that a product candidate will receive approval, Anktiva, ImmunityBio's novel antibody cytokine fusion protein, has received *Breakthrough Therapy* and *Fast Track* designations from the FDA in combination with bacillus Calmette-Guérin (BCG) for the treatment of patients with BCG-unresponsive non-muscle invasive bladder cancer (NMIBC) with carcinoma in situ (CIS) with or without Ta or T1 disease. In May 2022, we announced the submission of a BLA to the FDA for our product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease. In July 2022, we announced that the FDA had accepted our BLA for review and set a target Prescription Drug User Fee Act (PDUFA) action date of May 23, 2023. On May 9, 2023, the FDA delivered a complete response letter to us regarding the BLA, as described in greater detail in [Subsequent Events](#) below. It is unclear when the FDA will approve our BLA, if at all.

We have established GMP manufacturing capacity at scale with cutting-edge cell manufacturing expertise and ready-to-scale facilities, as well as extensive and seasoned R&D, clinical trial, and regulatory operations, and development teams.

### **COVID-19 Pandemic**

The COVID-19 pandemic continues to present a substantial public health and economic challenge around the world. Through the date of this Quarterly Report on Form 10-Q, we have not seen a material adverse impact to our business from the pandemic. However, given the unprecedented and continuously evolving nature of the pandemic, we cannot at this time predict the specific extent, duration, or full impact that this pandemic may have on our financial condition and results of operations, including ongoing and planned clinical trials. More specifically, the pandemic may result in prolonged impacts that we cannot predict at this time and we expect that such uncertainties will continue to exist for the foreseeable future. The impact of the pandemic on our financial performance will depend on future developments, including the duration and spread of the outbreak, impact of potential variants and the related governmental advisories and restrictions. These developments and the impact of the ongoing pandemic on the financial markets and the overall economy are highly uncertain. If the financial markets and/or the overall economy are impacted for an extended period, our results may be adversely affected. In addition, we anticipate that enrollment of patients in certain studies will likely take longer than previously forecasted and that our clinical trials may require additional time to complete which would in turn impact the timeline of BLA submissions of our product candidates and subsequent revenue generation.

These factors have been accounted for in the company's anticipated upcoming milestones. During any such delays in our clinical trials, we will continue to incur fixed costs such as selling, general and administrative expenses and operating expenses related to our laboratory, GMP manufacturing, and office facilities.

Many of our office-based employees have been working from home since mid-March 2020. Essential staffing levels for our research and development operations remain in place, including maintaining key personnel in our laboratory and GMP manufacturing facilities. It is likely that the pandemic and resulting mitigation efforts could have an impact in the future on our third-party suppliers who manufacture laboratory supplies required for our in-house manufacturing process, which in turn could have an impact on having sufficient clinical product supply available for our clinical trials. We have addressed this in part by ensuring that we have sufficient supplies on hand to weather interruptions in our supply chain.

We continue to monitor the impact of the COVID-19 pandemic on our business, including our clinical trials, manufacturing facilities and capabilities, and ability to access necessary resources. For a discussion of the risks presented by the COVID-19 pandemic to our results of operations and financial condition, see [Part II, Item 1A. "Risk Factors."](#)

### **Operating Results**

From inception through the date of this Quarterly Report on Form 10-Q, we have generated minimal revenue from non-exclusive license agreements related to our cell lines, the sale of our bioreactors and related consumables, and grant programs. We have no clinical products approved for commercial sale and have not generated any revenue from therapeutic and vaccine product candidates that are under development. We have incurred net losses in each year since our inception and, as of March 31, 2023, we had an accumulated deficit of \$2.5 billion. Our net losses attributable to ImmunityBio common stockholders were \$116.3 million and \$102.8 million for the three months ended March 31, 2023 and 2022, respectively. Substantially all of our net losses resulted principally from costs incurred in connection with our ongoing clinical trials and operations, our research and development programs, and from selling, general and administrative costs associated with our operations, including stock-based compensation expense.

As of March 31, 2023, we had 703 employees. Personnel of related companies who provide corporate, general and administrative, certain research and development, and other support services under our shared services agreement with NantWorks are not included in this number. For additional information, see [Note 10, Related-Party Agreements](#), of the "Notes to Unaudited Condensed Consolidated Financial Statements" that appears in Item 1. "Financial Statements" of this Quarterly Report on Form 10-Q. In anticipation of the commercialization of select drug candidates, we expect to continue to incur significant expenses and increasing operating losses for the foreseeable future, which may fluctuate significantly from quarter-to-quarter and year-to-year. See "*Future Funding Requirements*" below for a discussion of our anticipated expenditures and sources of capital we expect to access to fund these expenditures.

## Collaboration Agreements

We anticipate that strategic collaborations will continue to be an integral part of our operations, providing opportunities to leverage our partners' expertise and capabilities to gain access to new technologies and further expand the potential of our technologies and product candidates across relevant platforms. We believe we are well positioned to become a leader in immunotherapy due to our broad and vertically-integrated platforms and through complementary strategic partnerships.

We believe that our innovative approach to orchestrate and combine therapies for optimal immune system response will become a therapeutic foundation across multiple indications. Additionally, we believe that data from multiple clinical trials indicates N-803 has broad potential to enhance the activity of therapeutic mAbs, including checkpoint inhibitors (e.g., Keytruda), across a wide range of tumor types. N-803 is currently being studied in 14 clinical trials (both ImmunityBio and investigator-led) across 11 indications. We may also enter into supply arrangements for various investigational agents to be used in our clinical trials. See Part I, Item 1. "*Business—Collaboration and License Agreements*", of our Annual Report on Form 10-K filed with the SEC on March 1, 2023 for a more detailed discussion regarding our collaboration and license agreements.

## Agreements with Related Parties

Our Executive Chairman, Global Chief Scientific and Medical Officer and our principal stockholder, founded and has a controlling interest in NantWorks, which is a collection of companies in the healthcare and technology space. We have entered into arrangements with NantWorks, and certain affiliates of NantWorks. Affiliates of NantWorks are also affiliates of the company due to the common control by and/or common ownership interest of our Executive Chairman and Global Chief Scientific and Medical Officer.

## Related-Party Debt

The following description of the company's related-party promissory note does not purport to be complete and is qualified in its entirety by reference to the full text of the note, a copy of which is incorporated by reference in Part II, Item 6. "*Exhibits*" of this Quarterly Report on Form 10-Q.

### *Related-Party Convertible Note at Fair Value*

On March 31, 2023, the company executed a \$30.0 million promissory note with Nant Capital. This note bears interest at Term SOFR plus 8.0% per annum. The outstanding principal amount and any accrued and unpaid interest are due on the December 31, 2023 or upon the occurrence and continuation of an Event of Default (as defined in the note). The interest on this note will be paid on a quarterly basis beginning on June 30, 2023. The company may prepay the outstanding promissory note, at any time, in whole or in part, without penalty. The noteholder may convert the balance of the convertible promissory note and accrued interest in whole at their option following the Conversion Price Date, which is the trading day prior to the opening of the next open trading window, as determined by the company's board of directors in accordance with the company's Insider Trading Policy. The conversion price is equal to the greater of (i) the Nasdaq Official Closing Price and (ii) the consolidated closing bid price of the company's common stock on the Conversion Price Date. There is no floor on the conversion price for this convertible note, therefore, as of March 31, 2023 we cannot determine the total number of shares issuable upon conversion that may occur in the future.

The company received net proceeds of \$29.9 million from this financing, net of a \$0.1 million origination fee paid to the lender, which we intend to use, together with other available funds, to progress our pre-commercialization efforts and clinical development programs, fund other research and development activities, for capital expenditures, and for other general corporate purposes. We may also use a portion of the net proceeds to license intellectual property or to make acquisitions or investments.

The note is accounted for under ASC 825-10-15-4 FVO election. Under the FVO election, the note is initially measured at its issue-date estimated fair value and subsequently remeasured at estimated fair value on a recurring basis at each reporting period date. With each such remeasurement, the note will be adjusted to fair value, with the change in fair value recognized in *other income (expense), net*, on the condensed consolidated statement of operations. As of March 31, 2023, we had a balance of \$29.9 million in *related-party convertible note at fair value*, on the condensed consolidated balance sheet related to this note.

### *Additional Borrowing*

On May 9, 2023, the company's Executive Chairman and Global Chief Scientific and Medical Officer agreed to provide immediate non-convertible debt financing to the company in an amount of \$30.0 million, which will be available to the company as soon as the underlying agreements are executed. See [—Subsequent Events](#) below.

See [Note 9, Related-Party Debt](#), and [Note 10, Related-Party Agreements](#), of the "Notes to Unaudited Condensed Consolidated Financial Statements" that appear in Item 1. "Financial Statements" of this Quarterly Report on Form 10-Q for more detailed discussions of our related-party agreements.

### ***Immuno-Oncology Clinic, Inc.***

We entered into multiple agreements with the Clinic to conduct clinical trials related to certain of our product candidates. The Clinic is a related party as it is owned by an officer of the company and NantWorks manages the administrative operations of the Clinic.

In 2021, we completed a review of alternative structures that could support our more complex clinical trial requirements and made a decision to explore a potential transition of clinical trials at the Clinic to a new structure (including contracting with a new, non-affiliated professional corporation) to be determined and agreed upon by all parties. We continue productive negotiations with potential partners around alternative structures, but there can be no assurance that we will be successful. For the three months ended March 31, 2023 and 2022, we incurred \$0.6 million and \$0.4 million, respectively, in *research and development expense*, on the condensed consolidated statement of operations related to clinical trial and transition services provided by the Clinic.

See [Note 9, Related-Party Debt](#), and [Note 10, Related-Party Agreements](#), of the "Notes to Unaudited Condensed Consolidated Financial Statements" that appear in Item 1. "Financial Statements" of this Quarterly Report on Form 10-Q for more detailed discussions of our related-party agreements.

## **Components of our Results of Operations**

### ***Revenue***

From inception through the date of this Quarterly Report on Form 10-Q, we have generated minimal revenue from non-exclusive license agreements related to our cell lines, the sale of our bioreactors and related consumables, and grant programs. We have no clinical products approved for commercial sale and have not generated any revenue from therapeutic and vaccine product candidates that are under development. If we fail to complete the development of our product candidates in a timely manner or fail to obtain regulatory approval for them, we may never be able to generate substantial future revenue.

### ***Operating Expenses***

We generally classify our operating expenses into research and development, and selling, general and administrative expenses. Personnel costs, including salaries, benefits, bonuses, and stock-based compensation expense comprise a significant component of our research and development, and selling, general and administrative expense categories. We allocate expenses associated with our facilities and information technology costs between these two categories, primarily based on the nature of each cost.

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

Research and development expense consists of expenses incurred while performing research and development activities to discover and develop our technology and product candidates. This includes conducting preclinical studies and clinical trials, manufacturing development efforts and activities related to regulatory filings for product candidates. We recognize research and development expenses as they are incurred.

Our research and development expenses primarily consist of:

- clinical trial and regulatory-related costs;
- expenses incurred under agreements with investigative sites and consultants that conduct our clinical trials;

- expenses incurred under collaborative agreements;
- manufacturing and testing costs and related supplies and materials;
- employee-related expenses, including salaries, benefits, travel and stock-based compensation; and
- facility expenses dedicated to research and development.

The company classifies its research and development expenses as either external or internal. The company's external research and development expenses support its various preclinical and clinical programs. The company's internal research and development expenses include payroll and benefits expenses, facilities and equipment expense, and other indirect research and development expenses incurred in support of its research and development activities. The company's external and internal resources are not directly tied to any one research or drug discovery program and are typically deployed across multiple programs and are not allocated to specific product candidates or development programs.

We expect our research and development expenses to continue to increase significantly for the foreseeable future as we advance our product candidates through clinical development, including the conduct of our ongoing and any future clinical trials.

The process of conducting clinical trials necessary to obtain regulatory approval is costly and time consuming. The successful development of product candidates is highly uncertain. At this time, we cannot reasonably estimate the nature, timing or costs required to complete the remaining development of any product candidates. This is due to the numerous risks and uncertainties associated with the development of product candidates.

The costs of clinical trials may vary significantly over the life of a project owing to, but not limited to, the following:

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

We have only one product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease, for which we submitted a BLA to the FDA in May 2022. In July 2022, we announced the FDA has accepted our BLA for review and set a target PDUFA action date of May 23, 2023. On May 9, 2023, the FDA delivered a complete response letter to us regarding the BLA, as described in greater detail in [—Subsequent Events](#) below. There can be no assurance that our product candidate will be approved for commercial sale by the FDA, if ever. We do not expect any of our other product candidates to be commercially available for the foreseeable future, if ever.



### *Selling, General and Administrative*

Selling, general and administrative expense consists primarily of salaries and personnel-related costs, including employee benefits and any stock-based compensation, for employees performing functions other than research and development. This includes personnel in executive, finance, human resources, information technology, legal, and administrative support functions. Other selling, general and administrative expenses include facility-related costs not otherwise allocated to research and development expense, professional fees for auditing, tax and legal services, advertising costs, expenses associated with strategic business transactions and business development efforts, obtaining and maintaining patents, consulting costs, royalties and licensing costs, and costs of our information systems.

We expect that our selling, general and administrative expense will increase for the foreseeable future as we expand operations, build out information systems and increase our headcount to support continued research activities and the development of our clinical programs. We have incurred and expect that we will continue to incur in the future, additional costs associated with operating as a public company, including costs to comply with stock exchange listing and SEC requirements, future funding efforts, corporate governance, internal controls, investor relations, disclosure and similar requirements applicable to public companies. Additionally, if and when we believe that a regulatory approval of a product candidate appears likely, we expect to incur significant increases in our selling, general and administrative expense relating to the sales and marketing of the approved product candidate.

### ***Other Income and Expense***

Other income and expense consists primarily of interest income, interest expense, unrealized gains and losses on investments in equity securities and equity-method investments, realized gains and losses on both debt and equity securities, changes in fair value of warrant liabilities and related-party convertible note payable at fair value, and gains and losses on foreign currency transactions.

### ***Income Taxes***

We are subject to U.S. federal income tax, as well as income tax in Italy, South Korea, California and other states. From inception through March 31, 2023, we have not been required to pay U.S. federal and state income taxes because of current and accumulated NOLs.

## Discussion of Condensed Consolidated Results of Operations

### Comparison of the Three Months Ended March 31, 2023 and 2022

	Three Months Ended March 31,		\$ Change	% Change
	2023	2022		
	(Unaudited, \$ in thousands)			
<b>Revenue</b>	\$ 360	\$ 14	\$ 346	2471 %
Operating expenses:				
Research and development (including amounts with related parties)	79,264	55,378	23,886	43 %
Selling, general and administrative (including amounts with related parties)	32,676	40,608	(7,932)	(20)%
Total operating expenses	111,940	95,986	15,954	17 %
<b>Loss from operations</b>	(111,580)	(95,972)	(15,608)	16 %
Other income (expense), net:				
Interest and investment income, net	673	1,666	(993)	(60)%
Interest expense (including amounts with related parties)	(29,816)	(8,491)	(21,325)	251 %
Loss on equity method investment	(2,337)	(197)	(2,140)	1086 %
Change in fair value of warrant liabilities	27,554	—	27,554	— %
Other loss, net (including amounts with related parties)	(1,077)	(4)	(1,073)	26825 %
Total other expense, net	(5,003)	(7,026)	2,023	(29)%
<b>Loss before income taxes and noncontrolling interests</b>	(116,583)	(102,998)	(13,585)	13 %
Income tax expense	—	—	—	— %
<b>Net loss</b>	\$ (116,583)	\$ (102,998)	\$ (13,585)	13 %

#### Revenue

Revenue increased \$0.3 million for the three months ended March 31, 2023, as compared to the three months ended March 31, 2022. The increase was primarily driven by grant revenue received in 2023.

#### Research and Development Expense

Research and development expense increased \$23.9 million during the three months ended March 31, 2023, as compared to the three months ended March 31, 2022. The following table summarizes our research and development expenses for the three months ended March 31, 2023 and 2022, together with the changes in those items (in thousands):

	Three Months Ended March 31,		\$ Change
	2023	2022	
	(Unaudited, \$ in thousands)		
External research and development expenses	\$ 34,453	\$ 9,964	\$ 24,489
Internal research and development expenses:			
Personnel-related costs	24,404	23,123	1,281
Equipment, depreciation, and facility costs	13,111	11,836	1,275
Other research and development costs	7,296	10,455	(3,159)
Total internal research and development expenses	44,811	45,414	(603)
Total research and development expenses	\$ 79,264	\$ 55,378	\$ 23,886

Research and development expense increased \$23.9 million primarily attributable to the following:

- a \$24.5 million increase in external research and development expenses that was primarily due to a rise in contract manufacturing organization (CMO) fees and drug materials purchased and used in manufacturing, an increase in regulatory and compliance costs resulting from the BLA submission for our product candidate Anktiva, and higher clinical trial costs;
- a \$1.3 million increase in personnel-related costs that was primarily the result of additional stock awards to our employees and an increase in personnel involved in our quality control, clinical operations, and drug discovery and development activities;
- a \$1.3 million increase in equipment, depreciation, and facility costs that was primarily due to the expansion of our manufacturing facilities in California and New York, which resulted in increases in lease expense, maintenance costs, and depreciation expense; and
- a \$3.2 million decrease in other research and development costs that was primarily attributable to a decrease in lab and material supplies for internal manufacturing, partially offset by lower nonclinical collaboration expenses in the current period allocated to our joint venture and fewer sponsored research reimbursements.

We expect our research and development expenses to increase significantly for the foreseeable future as we continue to invest in research and development activities related to developing our product candidates and conduct our ongoing and planned clinical trials.

### ***Selling, General and Administrative Expense***

Selling, general and administrative expense decreased \$7.9 million during the three months ended March 31, 2023, as compared to the three months ended March 31, 2022. The reduction in selling, general and administrative expense was primarily driven by a \$9.8 million decline in legal expenses related to litigation settlements and defense costs in the prior period, a \$0.2 million reduction in IT equipment and software purchases, and a \$0.1 million reduction in insurance costs and other professional service fees. These decreases were partially offset by a \$2.0 million increase in personnel costs due to higher headcount and increased travel costs, and a \$0.2 million increase in stock-based compensation expense.

### ***Other Expense, Net***

Other expense, net decreased \$2.0 million during the three months ended March 31, 2023, as compared to the three months ended March 31, 2022. The decrease in other expense, net was mainly due to a \$27.6 million gain from a change in the fair value of warrant liabilities. These decreases were partially offset by a \$21.3 million increase in interest expense driven by an increase in related-party borrowings along with an increase in Term SOFR rates and amortization of related-party notes discounts, a \$2.1 million higher loss on our equity method investment, \$1.1 million lower net interest and investment income, a \$1.0 million increase in issuance costs allocated to the warrant liabilities, and a \$0.1 million loss from fixed asset disposals.

## **Financial Condition, Liquidity and Capital Resources**

### ***Sources of Liquidity***

Our principal sources of liquidity are our existing cash, cash equivalents, and marketable securities. We have historically invested our cash primarily in investment grade short- to intermediate-term corporate debt securities, commercial paper, government-sponsored securities, U.S. treasury securities, and foreign government bonds and classify these investments as available-for-sale. Certain of these investments are subject to general credit, liquidity and other market risks. The general condition of the financial markets and the economy may increase those risks and may affect the value and liquidity of investments and restrict our ability to access the capital markets.

### *Cash and Marketable Securities on Hand*

As of March 31, 2023, we had cash and cash equivalents, and marketable securities of \$92.1 million compared to \$108.0 million as of December 31, 2022. In April 2021, we entered into an open market sale agreement (Sale Agreement) with respect to an ATM offering program under which we may offer and sell, from time to time at our sole discretion, shares of our common stock, having an aggregate offering price of up to \$500.0 million through our sales agent, which was subsequently reduced by \$92.0 million during December 2022 in connection with a sale of our common stock. As of March 31, 2023, we had \$225.4 million available for future stock issuances under the ATM.

### *Shelf Registration Statement*

During February 2023, we filed a \$750.0 million shelf registration statement with the SEC on Form S-3 for the offering and sale of equity and equity-linked securities, including common stock, preferred stock, debt securities, depositary shares, warrants to purchase common stock, preferred stock or debt securities, subscription rights, purchase contracts, and units. In February 2023, we sold shares of our common stock and warrants valued at \$110.0 million under the shelf. As of March 31, 2023, we had \$640.0 million available for use under the shelf. This available shelf is in addition to the Open Market Sale Agreement. See “—*Proceeds from Registered Direct Offering*” below.

### *Proceeds from Registered Direct Offering*

On February 15, 2023, we entered into a securities purchase agreement with certain institutional investors for the sale of 14,072,615 shares of our common stock, as well as warrants that allow such investors to purchase an additional 14,072,615 shares of common stock at an exercise price of \$4.26 per share, for an aggregate purchase price of \$3.55 per share and accompanying warrant. This transaction generated net proceeds of approximately \$47.0 million, after deducting placement agent fees and other estimated offering costs. The closing of the offering occurred on February 17, 2023. We currently intend to use the net proceeds from this offering, together with other available funds, to progress our pre-commercialization efforts and clinical development programs, fund other research and development activities, for capital expenditures, and for other general corporate purposes. We may also use a portion of the net proceeds to license intellectual property or to make acquisitions or investments.

### *\$30.0 million Variable-Rate Convertible Promissory Note*

On March 31, 2023, the company executed a \$30.0 million promissory note with Nant Capital, an affiliated entity of the company due to the common control of our Executive Chairman and Global Chief Scientific and Medical Officer. This note bears interest at Term SOFR plus 8.0% per annum. The outstanding principal amount and any accrued and unpaid interest are due on the December 31, 2023 or upon the occurrence and continuation of an Event of Default (as defined in the note). The interest on this note will be paid on a quarterly basis beginning on June 30, 2023. The company may prepay the outstanding promissory note, at any time, in whole or in part, without penalty. The noteholder may convert the balance of the convertible promissory note and accrued interest in whole at their option following the Conversion Price Date, which is the trading day prior to the opening of the next open trading window, as determined by the company’s board of directors in accordance with the company’s Insider Trading Policy. The conversion price is equal to the greater of (i) the NASDAQ Official Closing Price and (ii) the consolidated closing bid price of the company’s common stock on the Conversion Price Date.

The company received net proceeds of \$29.9 million from this financing, net of a \$0.1 million origination fee paid to the lender, which we intend to use, together with other available funds, to progress our pre-commercialization efforts and clinical development programs, fund other research and development activities, for capital expenditures, and for other general corporate purposes. We may also use a portion of the net proceeds to license intellectual property or to make acquisitions or investments.

In order to complete the development of our current product candidates, and implement our business plan, we will require substantial additional funding. Furthermore, changing circumstances may cause us to increase our spending significantly faster than we currently anticipate, and we may need to raise even greater amounts of funds sooner if we choose to expand more rapidly than we presently anticipate. Moreover, our fixed expenses such as rent and other contractual commitments are substantial and are expected to increase in the future.

### *Additional Borrowing*

On May 9, 2023, the company's Executive Chairman and Global Chief Scientific and Medical Officer agreed to provide immediate non-convertible debt financing in an amount of \$30.0 million, which will be available to the company as soon as the underlying agreements are executed. See [—Subsequent Events](#) below.

### *Uses of Liquidity*

In addition to the cash used to fund our operating activities discussed in "[—Future Funding Requirements](#)" below, we will require cash to settle the following obligations:

- As of March 31, 2023, our indebtedness payable at maturity totals \$769.9 million (excluding unamortized related-party notes discounts and fair value adjustments), held by entities affiliated with Dr. Soon-Shiong.

Of this amount, \$505.0 million is due and payable on December 31, 2023. In the event of a default on the \$300.0 million loan (as defined in the promissory note), including if we do not repay the loan at maturity, the company has the right, at its sole option, to convert the outstanding principal amount and accrued and unpaid interest due under this note into shares of the company's common stock at price of \$5.67 per share.

Additionally, the March 31, 2023 \$30.0 million promissory note and accrued interest may be converted in whole at the option of the noteholder following the Conversion Price Date, which is the trading day prior to the opening of the next open trading window, as determined by the company's board of directors in accordance with the company's Insider Trading Policy. The conversion price is equal to the greater of (i) the NASDAQ Official Closing Price and (ii) the consolidated closing bid price of the company's common stock on the Conversion Price Date. There is no floor on the conversion price for this convertible note, therefore, as of March 31, 2023 we cannot determine the total number of shares issuable upon conversion that may occur in the future.

Furthermore, in the event of a Specified Transaction (as defined in the loan agreement), the noteholder can request the outstanding principal and interest due on the \$50.0 million promissory note be repaid in full upon consummation of such Specified Transaction.

The remaining \$264.9 million is due and payable on September 30, 2025, including any accrued and unpaid interest. The company can prepay the outstanding principal (together with accrued and unpaid interest), in whole or in part, at any time without premium or penalty and without the prior consent of the lender. On August 31, 2022, the terms of these fixed-rate promissory notes were amended and restated to include a conversion feature that gives each lender, at its sole option, at any time (other than when the lender is in receipt of a written notice of prepayment from the borrower), the right to convert the entire outstanding principal amount and accrued and unpaid interest due under each note at the time of conversion into shares of the company's common stock at a price of \$5.67 per share. Upon receipt of a written notice of prepayment from the borrower, the lender has the right, at its option, to convert the outstanding principal amount to be prepaid and the accrued and unpaid interest thereon (as specified in the notice of prepayment) into shares of the company's common stock at a price of \$5.67 per share.

There can be no assurance that the company can refinance these promissory notes or what terms will be available in the market at the time of refinancing. Furthermore, if prevailing interest rates or other factors at the time of refinancing result in higher interest rates upon refinancing, then the interest expense relating to the refinanced indebtedness would increase. These risks could materially adversely affect the company's financial condition, cash flows and results of operations.

- In connection with our 2017 acquisition of Altor, we issued CVRs under which we agreed to pay the prior stockholders of Altor approximately \$304.0 million of contingent consideration upon the successful regulatory approval of a BLA by the FDA, or foreign equivalent, for N-803 by December 31, 2022, and approximately \$304.0 million of contingent consideration upon calendar-year worldwide net sales of N-803 exceeding \$1.0 billion prior to December 31, 2026, with amounts payable in cash or shares of our common stock or a combination thereof.

With respect to the regulatory milestone CVR agreement, in May 2022 we announced the submission of a BLA to the FDA for our product candidate, Anktiva (N-803) in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease. In July 2022 we announced that the FDA had accepted our BLA for review and set a target PDUFA action date of May 23, 2023. On May 9, 2023, the FDA delivered a complete response letter to us regarding the BLA, as described in greater detail in [Subsequent Events](#) below. It is unclear when the FDA will approve our BLA, if at all. The FDA did not approve our BLA on or before December 31, 2022, and therefore the regulatory milestone was not met, and the regulatory milestone CVR agreement terminated in accordance with its terms.

With respect to the net sales milestone CVR agreement, as of March 31, 2023, Dr. Soon-Shiong and his related party hold approximately \$139.8 million of net sales CVRs and they have both irrevocably agreed to receive shares of the company's common stock in satisfaction of their CVRs. We may be required to pay the other prior Altor stockholders up to \$164.2 million for their net sales CVRs should they choose to have their CVRs paid in cash instead of common stock. We may need to seek additional sources of capital to satisfy the CVR obligations if they are achieved.

- In connection with our acquisition of VivaBioCell, we are obligated to pay the former owners approximately \$2.2 million of contingent consideration upon the achievement of a regulatory milestone relating to the GMP-in-a-Box technology.

### Discussion of Condensed Consolidated Cash Flows

The following discussion of ImmunityBio's cash flows is based on the condensed consolidated statements of cash flows in Item 1. "Financial Statements" and is not meant to be an all-inclusive discussion of the changes in its cash flows for the periods presented below.

The following table sets forth our primary sources and uses of cash for periods indicated (in thousands):

	Three Months Ended March 31,	
	2023	2022
	(Unaudited)	
Cash (used in) provided by:		
Operating activities	\$ (84,310)	\$ (74,930)
Investing activities	(8,484)	(69,313)
Financing activities	76,888	(298)
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	(254)	(175)
Net change in cash, cash equivalents, and restricted cash	\$ (16,160)	\$ (144,716)

### Operating Activities

For the three months ended March 31, 2023, net cash used in operating activities of \$84.3 million consisted of a net loss of \$116.6 million, partially offset by \$27.7 million of cash provided by net working capital and \$4.6 million in adjustments for non-cash items. The changes in net working capital consisted primarily of an increase of \$18.6 million in accrued expenses and other liabilities, a decrease of \$9.7 million in prepaid and other current assets, an increase of \$0.7 million in accounts payable, and a decrease of \$0.3 million in other assets, partially offset by decreases of \$1.5 million in operating lease liabilities, and \$0.1 million with related parties. Adjustments for non-cash items primarily consisted of \$11.5 million in amortization of debt issuance costs and accretion of discounts, \$10.9 million in stock-based compensation expense, \$4.7 million in depreciation and amortization expense, \$2.5 million in non-cash interest and debt discount amortization primarily related to related-party promissory notes, \$1.6 million in non-cash lease expense related to operating lease right-of-use assets, \$1.0 million in transaction costs allocable to warrant liabilities, and \$0.1 million of other, reduced by a \$27.6 million change in the fair value of warrant liabilities, and \$0.1 million in unrealized gains on equity securities driven by an increase in the value of our investments.

For the three months ended March 31, 2022, net cash used in operating activities of \$74.9 million consisted of a net loss of \$103.0 million, partially offset by \$18.5 million in adjustments for non-cash items and \$9.6 million of cash provided by net working capital changes. Adjustments for non-cash items primarily consisted of \$10.0 million in stock-based compensation expense, \$4.1 million in depreciation and amortization expense, \$3.0 million in non-cash interest related primarily to related-party promissory notes, \$1.3 million in non-cash lease expense related to operating lease right-of-use assets, \$1.1 million in other non-cash items, and a \$0.4 million in amortization of debt issuance costs and accretion of discounts, reduced by \$1.4 million in unrealized gains on equity securities driven by an increase in the value of our investments. The changes in net working capital consisted primarily of increases of \$10.9 million in accrued expenses and other liabilities and \$0.8 million in accounts payable and a decrease of \$0.1 million in other assets, partially offset by decreases of \$1.6 million with related parties and \$0.4 million in operating lease liabilities, and an increase of \$0.2 million in prepaid and other current assets.

We have historically experienced negative cash flows from operating activities, with such negative cash flows likely to continue for the foreseeable future.

### ***Investing Activities***

For the three months ended March 31, 2023, net cash used in investing activities was \$8.5 million, which included cash outflows of \$8.4 million of purchases of property, plant and equipment, and \$0.2 million of purchases of marketable debt securities, partially offset by proceeds of \$0.1 million from maturities and sales of marketable debt and equity securities. Our investments in property, plant and equipment are primarily related to acquisitions of equipment that will be used for the manufacturing of our product candidates and expenditures related to the build out of our manufacturing facilities.

For the three months ended March 31, 2022, net cash used in in investing activities was \$69.3 million, which included \$34.1 million of purchases of marketable debt securities, \$27.3 million of purchases of property, plant and equipment (including construction in process and depreciable property acquired in the Dunkirk acquisition), \$21.2 million for the purchase of intangible assets (related to the Dunkirk acquisition), and a \$1.0 million investment in the joint venture, partially offset by cash inflows of \$14.3 million from maturities and sales of marketable debt and equity securities. Our investments in property, plant and equipment are primarily related to acquisitions of equipment that will be used for the manufacturing of our product candidates and expenditures related to the build out of our manufacturing facilities.

We expect to accelerate our capital spending as we scale our GMP manufacturing capabilities, which will require significant capital for the foreseeable future.

### ***Financing Activities***

For the three months ended March 31, 2023, net cash provided by financing activities was \$76.9 million, which consisted of \$47.3 million in net proceeds from a registered direct offering, \$29.9 million in net proceeds from issuances of related-party promissory notes, and \$0.1 million of proceeds from the exercise of stock options, partially offset by \$0.4 million related to net share settlement of vested RSUs for payment of payroll tax withholding.

For the three months ended March 31, 2022, net cash used in financing activities was \$0.3 million, which consisted of \$0.4 million related to net share settlement of vested RSUs for payment of payroll tax withholding, partially offset by \$0.1 million in proceeds from exercises of stock options.

### ***Future Funding Requirements***

From inception through the date of this Quarterly Report on Form 10-Q, we have generated minimal revenue, we have no clinical products approved for commercial sale and we have not generated any revenue from therapeutic and vaccine product candidates that are under development. We do not expect to generate significant revenue unless and until we obtain regulatory approval of and commercialize any of our product candidates, and we do not know when, or if, this will occur. In addition, we expect our operating expenses to significantly increase in connection with our ongoing development activities, particularly as we continue the research, development and clinical trials of, and seek regulatory approval for, our product candidates. We have also incurred and expect that we will continue to incur in the future additional costs associated with operating as a public company as well as costs related to future fundraising efforts. In addition, subject to obtaining regulatory approval of our product candidates, we expect to incur significant commercialization expenses for product sales, marketing, manufacturing and distribution. We anticipate that we will need substantial additional funding in connection with our continuing operations.

We expect that our operating expenses will increase substantially if and as we:

- continue research and development, including preclinical and clinical development of our existing product candidates;
- potentially seek regulatory approval for our product candidates;
- seek to discover and develop additional product candidates;
- establish a commercialization infrastructure and scale up our manufacturing and distribution capabilities to commercialize any of our product candidates for which we may obtain regulatory approval;
- seek to comply with regulatory standards and laws;
- maintain, leverage and expand our intellectual property portfolio;
- hire clinical, manufacturing, scientific and other personnel to support our product candidates' development and future commercialization efforts;
- add operational, financial and management information systems and personnel; and
- incur additional legal, accounting and other expenses in operating as a public company.

As a result of continuing anticipated operating cash outflows, we believe that substantial doubt exists regarding our ability to continue as a going concern without additional funding or financial support. However, we believe our existing cash, cash equivalents, and investments in marketable securities, together with capital to be raised through equity offerings (including the ATM) and our potential ability to borrow from affiliated entities, will be sufficient to fund our operations through at least the next 12 months following the issuance date of the condensed consolidated financial statements based primarily upon our Executive Chairman and Global Chief Scientific and Medical Officer's intent and ability to support our operations with additional funds, including loans from affiliated entities, as required, which we believe alleviates such doubt. We may also seek to sell additional equity, through one or more follow-on public offerings, or in separate financings, or obtain a credit facility. However, we may not be able to secure such external financing in a timely manner or on favorable terms. Without additional funds, we may choose to delay or reduce our operating or investment expenditures. Further, because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates, we may need additional funds to meet our needs sooner than planned.

We will need to obtain additional financing to fund our future operations, including completing the development and commercialization of our product candidates. Changing circumstances may cause us to increase our spending significantly faster than we currently anticipate and we may need to raise additional funds sooner than we presently anticipate. Moreover, research and development and our operating costs and fixed expenses such as rent and other contractual commitments, including those for our research collaborations, are substantial and are expected to increase in the future.

Our future funding requirements will depend on many factors, including, but not limited to:

- progress, timing, number, scope and costs of researching and developing our product candidates and our ongoing, planned and potential clinical trials;
- time and cost of regulatory approvals;
- our ability to successfully commercialize any product candidates, if approved and the costs of such commercialization activities;
- revenue from product candidates that we may commercialize, if any, including the selling prices for such potential products and the availability of adequate third-party coverage and reimbursement for patients;
- cost of building, staffing and validating our own manufacturing facilities in the U.S., including having a product candidate successfully manufactured consistent with FDA and European Medicines Agency (EMA) regulations;
- terms, timing and costs of our current and any potential future collaborations, business or product acquisitions, CVRs, milestones, royalties, licensing or other arrangements that we have established or may establish;



- time and cost necessary to respond to technological, regulatory, political and market developments; and
- costs of filing, prosecuting, maintaining, defending and enforcing any patent claims and other intellectual property rights.

Unless and until we can generate a sufficient amount of revenues, we may finance future cash needs through public or private equity offerings, license agreements, debt financings, collaborations, strategic alliances and marketing or distribution arrangements. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms, or at all, including but not limited to the offering, issuance and sale by us of our common stock that may be issued and sold under the ATM. As of March 31, 2023, we had \$225.4 million available for future stock issuances under the ATM. See [Note 12, Stockholders' Deficit](#), of the "Notes to Unaudited Condensed Consolidated Financial Statements" that appears in Item 1. "Financial Statements" of this Quarterly Report on Form 10-Q.

During February 2023, we filed a \$750.0 million shelf registration statement with the SEC on Form S-3 for the offering and sale of equity and equity-linked securities, including common stock, preferred stock, debt securities, depositary shares, warrants to purchase common stock, preferred stock or debt securities, subscription rights, purchase contracts, and units. As of March 31, 2023, we had \$640.0 million available for use under the shelf. See [Note 12, Stockholders' Deficit](#), of the "Notes to Unaudited Condensed Consolidated Financial Statements" that appears in Item 1. "Financial Statements" of this Quarterly Report on Form 10-Q.

To the extent that we raise additional capital through the sale of equity or equity-linked securities, including convertible debt or through the ATM or other offerings, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. The incurrence of additional indebtedness would result in increased fixed payment obligations and could involve certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we raise additional funds through strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms unfavorable to us. We have no committed source of additional capital and if we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may be required to delay or reduce the scope of or eliminate one or more of our research or development programs or our commercialization efforts. Our current license and collaboration agreements may also be terminated if we are unable to meet the payment obligations under those agreements. As a result, we may seek to access the public or private capital markets whenever conditions are favorable, even if we do not have an immediate need for additional capital at that time.

### **Contractual Obligations**

We have material cash requirements to pay related-party affiliates and third parties under various contractual obligations discussed below:

- We are obligated to make payments to several related-party affiliates under written agreements and other informal arrangements. We are also obligated to pay interest and to repay principal under our related-party notes. For information regarding our financing obligations, see [Note 9, Related-Party Debt](#), of the "Notes to Unaudited Condensed Consolidated Financial Statements" that appears in Item 1. "Financial Statements" of this Quarterly Report on Form 10-Q.
- We are obligated to make payments under our operating leases, which primarily consist of facility leases. For information regarding our lease obligations, see [Note 8, Lease Arrangements](#), and [Note 10, Related-Party Agreements](#), of the "Notes to Unaudited Condensed Consolidated Financial Statements" that appear in Item 1. "Financial Statements" of this Quarterly Report on Form 10-Q.
- In connection with the acquisitions of Altor and VivaBioCell, we are obligated to pay contingent consideration upon the achievement of certain milestones. For information regarding our contingent consideration obligations, see [Note 7, Commitments and Contingencies—Contingent Consideration Related to Business Combinations](#), of the "Notes to Unaudited Condensed Consolidated Financial Statements" that appears in Item 1. "Financial Statements" of this Quarterly Report on Form 10-Q.

- We have contractual obligations to make payments to related-party affiliates and third parties under unconditional purchase arrangements. For information on these unconditional purchase obligations, see Note 7, *Commitments and Contingencies—Unconditional Purchase Obligations*, of the “Notes to Consolidated Financial Statements” that appears in Part II, Item 8. “Financial Statements and Supplementary Data” of our Annual Report on Form 10-K filed with the SEC on March 1, 2023.
- We have certain contractual commitments that are expected to be paid within one year, depending on the progress of build outs, completion of services, and the realization of milestones associated with third-party agreements. This amount totals \$132.4 million and is primarily related to capital expenditures, open purchase orders as of March 31, 2023 for the acquisition of goods and services in the ordinary course of business, and near term upfront milestone payments to third parties.
- In addition, we have contractual commitments that are expected to be paid in fiscal year 2024 and beyond based on the achievement of various development, regulatory and commercial milestones for agreements with third parties. These payments may not be realized or may be modified and are contingent upon the occurrence of various future events, substantially all of which have a high degree of uncertainty of occurring. As of March 31, 2023, the maximum amount that may be payable related to these commitments is \$775.3 million.
- In connection with our leasehold interest in the Dunkirk Facility, we committed to spend an aggregate of \$1.52 billion on operational expenses during the initial 10-year term, and an additional \$1.50 billion on operational expenses if we elect to renew the lease for the additional 10-year term. These amounts are not included in the discussion above. See Note 6, *Collaboration and License Agreements and Acquisition*, of the “Notes to Unaudited Condensed Consolidated Financial Statements” that appears in Item 1. “Financial Statements” of this Quarterly Report on Form 10-Q for additional information.

### **Critical Accounting Policies and Estimates**

In Part II, Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of our Annual Report on Form 10-K filed with the SEC on March 1, 2023, we disclose those accounting policies that we consider to be significant in determining our results of operations and financial condition. There have been no material changes to those policies that we consider to be significant as of the date of this Quarterly Report on Form 10-Q.

Our discussion and analysis of our financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of our condensed consolidated financial statements requires us to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses for the reporting period. On an ongoing basis, we evaluate our estimates, including those related to the valuation of equity-based awards, deferred income taxes and related valuation allowances, preclinical and clinical trial accruals, impairment assessments, contingent value right measurement and assessments, the measurement of right-of-use assets and lease liabilities, useful lives of long-lived assets, loss contingencies, fair value calculation of warrants and convertible promissory notes, fair value measurements, asset acquisition, and the assessment of our ability to fund our operations for at least the next 12 months from the date of issuance of these condensed consolidated financial statements. We base our estimates on historical experience and on various other market-specific and relevant assumptions that we believe to be reasonable under the circumstances. Estimates are assessed each period and updated to reflect current information, such as the economic considerations related to the impact that the ongoing coronavirus pandemic could have on our significant accounting estimates. Actual results could differ from those estimates.

### **Recent Accounting Pronouncements**

Refer to Note 2, *Summary of Significant Accounting Policies*, of the “Notes to Unaudited Condensed Consolidated Financial Statements” that appears in Item 1. “Financial Statements” of this Quarterly Report on Form 10-Q for a discussion of recent accounting pronouncements or changes in accounting pronouncements that are of significance, or potential significance, to us.

## **Subsequent Events**

### ***BLA Update***

ImmunityBio, Inc. announced that it had received a complete response letter from the FDA on May 9, 2023 regarding its BLA for its product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease. The letter indicated that the FDA had determined that it cannot approve the BLA in its present form, and the FDA had made recommendations to address the issues raised.

The deficiencies relate to the FDA's pre-license inspection of the company's third-party contract manufacturing organizations. Satisfactory resolution of the observations noted at the pre-license inspection is required before the BLA may be approved. The FDA further provided recommendations specific to additional Chemistry, Manufacturing and Controls (CMC) issues and assays to be resolved.

No new preclinical studies or Phase 3 clinical trials to evaluate safety or efficacy were requested by the FDA. The FDA requested that the company provide updated duration of response data of the efficacy population as identified by the FDA in the company's resubmission, as well as a safety update.

The company plans to request a meeting with the FDA as soon as possible to address the subject matter of the letter and a response timeline, and plans to diligently address and resolve the issues identified and seek approval as expeditiously as possible.

### ***Business Development Updates***

On May 9, 2023, the company's Executive Chairman and Global Chief Scientific and Medical Officer agreed to provide immediate non-convertible debt financing to the company in an amount of \$30.0 million on substantially similar terms as prior financings, including an interest rate of Term SOFR plus 8% per annum and a maturity date of December 31, 2023.

As previously disclosed, the company has been exploring partnering with a large biopharmaceutical company for commercialization of N-803 for intravesical administration. The company has confirmed with the potential partner that these negotiations will continue notwithstanding the letter referenced above, with the view of completing such a transaction during 2023, though there can be no assurance that the company will complete a transaction on acceptable terms in accordance with this timeline or at all.

### **ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.**

Financial market risks related to interest rates, foreign currency exchange rates, market risk on the price and volatility of our common stock, and inflation are described in Item 7A. “Quantitative and Qualitative Disclosures About Market Risk” of our Annual Report on Form 10-K filed with the SEC on March 1, 2023. There have been no material changes to such financial market risks as of the date of this Quarterly Report on Form 10-Q. We do not currently anticipate any other near-term changes in the nature of our financial market risk exposures or in management’s objectives and strategies with respect to managing such exposures.

### **ITEM 4. CONTROLS AND PROCEDURES.**

#### **Evaluation of Disclosure Controls and Procedures**

Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives of ensuring that information we are required to disclose in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our chief executive officer (CEO) and chief financial officer (CFO), as appropriate, to allow timely decisions regarding required disclosures, and is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. There is no assurance that our disclosure controls and procedures will operate effectively under all circumstances.

Management, with the participation of our CEO and CFO, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2023. The term “disclosure controls and procedures,” as defined in Rule 13a-15(e) of the Exchange Act means controls and other procedures of a company that are designed to provide reasonable assurance that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to provide reasonable assurance that information required to be disclosed is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their desired control objectives, and management necessarily is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of March 31, 2023, our CEO and CFO have concluded that, as of March 31, 2023, our disclosure controls and procedures were effective at the reasonable assurance level.

#### **Changes in Internal Control over Financial Reporting**

There have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) during the fiscal quarter ended March 31, 2023, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

#### **Inherent Limitations on Effectiveness of Controls**

Management recognizes that a control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud or error, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

## PART II—OTHER INFORMATION

### ITEM 1. LEGAL PROCEEDINGS.

From time to time, we may be involved in various claims and legal proceedings relating to claims arising out of our operations. We are not currently a party to any legal proceedings that, in the opinion of our management, are likely to have a material adverse effect on our business. If we are served with any such complaints, we will assess at that time any contingencies for which we may need to reserve. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources, and other factors.

#### *Altor BioScience, LLC Litigation*

In 2017, NantCell, Inc. (NantCell) announced it had entered into a definitive merger agreement to acquire Altor BioScience Corporation. An action captioned *Gray v. Soon-Shiong, et al.* was filed in Delaware Chancery Court by plaintiffs Clayland Boyden Gray (Gray) and Adam R. Waldman. The plaintiffs, two minority stockholders, asserted claims against the company and other defendants for (1) breach of fiduciary duty and (2) aiding and abetting breach of fiduciary duty and filed a motion to enjoin the merger. The court denied the motion and permitted the merger to close.

Subsequent to the close of the merger, in 2017 the plaintiffs (joined by two additional minority stockholders, Barbara Sturm Waldman and Douglas E. Henderson (Henderson)) filed a second amended complaint, including appraisal claims, and which the defendants subsequently moved to dismiss. In a second action, Dyad Pharmaceutical Corporation (Dyad) filed a petition in Delaware Chancery Court for appraisal in connection with the merger. The defendants moved to dismiss the appraisal petition in 2018. The court issued an oral ruling in 2019 that dismissed certain claims and dismissed Altor BioScience from the action. The following claims remained: (a) the appraisal claims by all plaintiffs and Dyad (against Altor BioScience, LLC), and (b) Henderson's claims for breach of fiduciary duty and aiding and abetting breach of fiduciary duty.

In 2019, the court issued a written order implementing its ruling on the defendants' motions (the Implementing Order). In the Implementing Order, the court confirmed that all fiduciary duty claims brought by Gray, both individually and as trustee of the Gordon Gray Trust f/b/o C. Boyden Gray, were dismissed. The plaintiffs then moved for leave to file a third amended complaint to add two former Altor stockholders as plaintiffs and a fiduciary duty claim on behalf of a purported class of former Altor stockholders, which the defendants opposed.

In 2020, the court granted the plaintiffs' motion, and the plaintiffs filed the third amended complaint. In 2020, the defendants answered the third amended complaint and asserted counterclaims against the plaintiffs. The defendants sought damages for attorneys' fees and costs incurred as a result of the breaches of "standstill" agreements and of stockholder releases. The plaintiffs filed an answer denying the counterclaims and asserting defenses.

The shares of the former Altor stockholders seeking appraisal met the definition of dissenting shares under the merger agreement and were not entitled to receive any portion of the merger consideration at the closing date, given that those shares were the subject of the above-described appraisal claims.

In late March 2022, the company agreed to the terms of a settlement with the appraisal petitioners, without any admission of liability or fault. The settlement provided that in exchange for complete releases, the appraisal petitioners, who as a group held 3,167,565 dissenting Altor shares, collectively would receive an aggregate of 2,229,296 shares of the company's common stock issued in a private placement, plus an aggregate of \$21.13 in cash in lieu of fractional shares. The company's Board of Directors approved the settlement and stock issuance in April 2022, and the court approved the settlement and dismissed the appraisal petitioners' claims on July 9, 2022. On July 9, 2022, the company issued 2,229,296 shares of its common stock with an aggregate market value of \$10.7 million, based on the closing price of its common stock on the Nasdaq as of July 8, 2022, to the appraisal petitioners pursuant to the court-approved settlement agreement.

In late April 2022, the company also agreed to the terms of a settlement with the putative class plaintiffs without any admission of liability or fault. In exchange for class-wide releases, the company committed to make a settlement payment of \$5.0 million in cash by December 31, 2022. On December 8, 2022, the Delaware Court of Chancery entered a final judgment approving the settlement, and the company timely made the \$5.0 million settlement payment.

### **Sorrento Therapeutics, Inc. Litigation**

Sorrento Therapeutics, Inc. (Sorrento), derivatively on behalf of Immunotherapy NANTibody, LLC (NANTibody), filed an action in the Superior Court of California, Los Angeles County (the Superior Court) against the company's subsidiary NantCell, Dr. Soon-Shiong, and Charles Kim. The action alleged that the defendants improperly caused NANTibody to acquire IgDraSol, Inc. from NantPharma, LLC (NantPharma) and sought to have the transaction undone and the purchase amount returned to NANTibody. In 2019, we filed a demurrer to several causes of action alleged in the Superior Court action, and Sorrento filed an amended complaint, eliminating Mr. Kim as a defendant and dropping the causes of action we had challenged in our demurrer. The company believes the case is without merit and intends to vigorously defend against the claims asserted. Trial has been set to commence in Sorrento's Superior Court action on July 17, 2023.

Sorrento filed a related arbitration proceeding (the Cynviloq arbitration) against Dr. Soon-Shiong and NantPharma; the company was not named in the Cynviloq arbitration. In 2020, the Superior Court granted Dr. Soon-Shiong's request for a preliminary injunction barring Sorrento from pursuing claims against him in the Cynviloq arbitration. Sorrento then filed the claims it had previously asserted in arbitration against Dr. Soon-Shiong in the Superior Court, and at Sorrento's request, the arbitrator entered an order dismissing Sorrento's claims against Dr. Soon-Shiong in the Cynviloq arbitration. The hearing in the Cynviloq arbitration commenced in June 2021, and continued with breaks until early October 2021. The parties completed post-hearing briefing in early May 2022, and summations were heard on September 8, 2022. On December 20, 2022, the parties received the arbitrator's final award; the award is in favor of Sorrento and against NantPharma in the amount of approximately \$125 million. On December 28, 2022, Sorrento submitted an application for modification of the final award to include prejudgment interest in excess of \$83 million; on January 20, 2023, Sorrento's application was denied. On February 2, 2023, Sorrento filed a petition to confirm the NantPharma award, and on February 13, 2023, NantPharma responded with a motion to vacate; on March 17, 2023, the Superior Court entered an order confirming the NantPharma award and denying the motion to vacate, and on April 7, 2023, the Superior Court entered the judgment on the award. The company was not a party to the Cynviloq arbitration and we believe that neither the company nor any of its subsidiaries has any obligations with respect to the award against NantPharma, and we intend to defend vigorously against attempts by Sorrento to pursue any such theory.

Also in 2019, the company and Dr. Soon-Shiong filed cross-claims in the Superior Court action against Sorrento and its Chief Executive Officer Henry Ji, asserting claims for fraud, breach of contract, breach of the covenant of good faith and fair dealing, tortious interference with contract, unjust enrichment, and declaratory relief. Our claims alleged that Dr. Ji and Sorrento breached the terms of an exclusive license agreement between the company and Sorrento related to Sorrento's antibody library and that Sorrento did not perform its obligations under the exclusive license agreement. The Superior Court ruled that the company's claims should be pursued in arbitration and that Dr. Soon-Shiong's claims could be pursued in Superior Court.

In 2019, the company, along with NANTibody, filed an arbitration against Sorrento and Dr. Ji asserting our claims relating to the exclusive license agreement. Sorrento filed counterclaims against the company and NANTibody in the arbitration. The hearings in the NANTibody arbitration commenced in April 2021 and concluded in early August 2021. After post-hearing briefing was concluded, the parties were notified on November 30, 2021 that the arbitrator in the NANTibody arbitration had passed away. A substitute arbitrator was appointed on February 25, 2022, and the parties worked with the substitute arbitrator to conclude the proceedings. Additional hearing sessions were held in May and July 2022, and summations took place on August 2, 2022.

On December 2, 2022, the arbitrator issued a final award finding that Sorrento had breached the two exclusive license agreements with NantCell and NANTibody. The arbitrator awarded NantCell approximately \$156.8 million and NANTibody approximately \$16.7 million, plus post-award interest accruing at a daily rate. On December 21, 2022, NantCell and NANTibody filed petitions in the Superior Court to confirm the arbitration award; on January 16, 2023, Sorrento filed a response to the petitions and moved to vacate the award. On February 7, 2023, after a hearing, the Superior Court entered orders confirming the arbitration award and denying Sorrento's motion to vacate. The Superior Court entered judgments against Sorrento in the aggregate amount of approximately \$176.4 million plus 10% post-judgment interest, of which approximately \$159.4 million is payable to NantCell, and the remainder of which is payable to NANTibody. On February 13, 2023, Sorrento informed counsel to the company that it had filed a Chapter 11 proceeding in the U.S. District Court for the Southern District of Texas, *In re: Sorrento Therapeutics, Inc., et al.*, Case No. 23-bk-90085 (Bankr. S.D. Tex.) (DRJ). The company intends to continue to pursue vigorously, consistent with its rights in light of Sorrento's Chapter 11 filing, the collection of the judgments from Sorrento, but we make no assurances that we will receive the full amount or with respect to the timing of our receipt of any funds.

The Superior Court action remains pending, and it remains to be determined how, if at all, the award in the arbitration will affect the Superior Court action. An estimate of the possible loss or range of loss resulting from the Superior Court litigation cannot be made at this time.

#### ***Shenzhen Beike Biotechnology Co. Ltd. Arbitration***

In 2020, we received a Request for Arbitration before the International Chamber of Commerce, International Court of Arbitration. The arbitration relates to a license, development, and commercialization agreement that Altor entered into with Beike in 2014, which agreement was amended and restated in 2017, pursuant to which Altor granted to Beike an exclusive license to use, research, develop and commercialize products based on N-803 in China for human therapeutic uses. In the arbitration, Beike is asserting a claim for breach of contract under the license agreement. Among other things, Beike alleges that we failed to use commercially reasonable efforts to deliver to Beike materials and data related to N-803. Beike is seeking specific performance and declaratory relief for the alleged breaches. On September 25, 2020, the parties entered into a standstill agreement under which, among other things, the parties affirmed they will perform certain of their obligations under the license agreement by specified dates and agreed that all deadlines in the arbitration are indefinitely extended. The standstill agreement could be terminated by any party on ten calendar days' notice, and upon termination, the parties had the right to pursue claims arising from the license agreement in any appropriate tribunal. On March 20, 2023, we terminated the standstill agreement, and on April 11, 2023, Beike served an amended Request for Arbitration. We have until May 19, 2023 to file a response. Given that this action remains at the pleading stage and no discovery has occurred, it remains too early to evaluate the likely outcome of the case or to estimate any range of potential loss. We believe the claims lack merit and intend to defend the case vigorously and that we may have counterclaims.

#### ***Altor BioScience, LLC, and NantCell, Inc. Matters Against Dr. Hing Wong and HCW Biologics, Inc.***

On December 23, 2022, Altor and NantCell filed an arbitration demand against Dr. Hing Wong, former CEO of Altor and NantCell. The demand asserts claims for breach of Dr. Wong's contracts with the companies, breach of the covenant of good faith and fair dealing, conversion, fraudulent concealment, unjust enrichment, breach of fiduciary duty, and replevin. The same day, Dr. Wong filed an arbitration demand seeking a declaratory judgment finding that Dr. Wong is not liable to Altor or NantCell for any of their claims. The parties have agreed to consolidate the arbitration filings in one proceeding, and on January 23, 2023, Dr. Wong filed an Answering Statement denying the claims.

Also on December 23, 2022, Altor and NantCell filed a complaint in the United States District Court for the Southern District of Florida against HCW Biologics, Inc. (HCW Biologics), Dr. Wong's new company. Altor's and NantCell's complaint asserts claims for misappropriation of trade secrets under both Florida and federal law, inducement of breach of contract, tortious interference with contractual relations, inducement of breach of fiduciary duty, conversion, unjust enrichment, replevin, request for assignment of patents and patent applications, and establishment of a constructive trust. On January 31, 2023, HCW Biologics filed motions to compel arbitration of Altor's and NantCell's claims, or in the alternative to stay or dismiss them. Altor and NantCell filed an opposition to the motions on February 14, 2023, and HCW Biologics filed reply papers on February 21, 2023. At a hearing on April 18, 2023, the court heard argument and requested supplemental briefing. After the hearing, the parties reached an agreement to consolidate all claims in a single arbitration proceeding. On May 1, 2023, we filed our arbitration demand asserting the same claims against HCW that were asserted in the federal court complaint; HCW has yet to respond.

#### ***Stipulation of Settlement***

In 2019, following approval by our Board of Directors, we entered into a settlement agreement (the Stipulation of Settlement) with three stockholders of the company, each of whom had submitted a stockholder demand for the Board of Directors to take action to remedy purported harm to the company resulting from certain alleged wrongful conduct concerning, among other things, disclosures about Dr. Soon-Shiong's compensation and a related-party lease agreement. The Stipulation of Settlement called for us to adopt certain governance changes, and for the three stockholders to file a stockholder derivative action in the Superior Court of the State of California, County of San Diego, followed by an application for court approval of the Stipulation of Settlement. The court entered an order preliminarily approving the Stipulation of Settlement. Pursuant to the Stipulation of Settlement, we provided stockholders with notice of the settlement and the final settlement hearing.

## **ITEM 1A. RISK FACTORS.**

*Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, any of which may be relevant to decisions regarding an investment in or ownership of our stock. The occurrence of any of these risks could have a significant adverse effect on our reputation, business, financial condition, results of operations, growth, and ability to accomplish our strategic objectives. We have organized the description of these risks into groupings in an effort to enhance readability, but many of the risks interrelate or could be grouped or ordered in other ways, so no special significance should be attributed to the groupings or order below.*

### **Risk Factor Summary**

#### **Risks Related to Our Limited Operating History, Financial Condition and Capital Requirements**

- We anticipate needing additional financing to fund our operations and complete the development and commercialization of our various product candidates, and if we are unable to obtain such financing when needed, or on acceptable terms, we may be unable to complete the development and commercialization of our product candidates.
- Our debt could adversely affect our cash flows and limit our flexibility to raise additional capital.
- Conversion of certain related-party notes may dilute the ownership interest of existing stockholders or may otherwise depress the price of our common stock.
- The accounting method for convertible debt securities could have a material effect on our reported financial results.
- The value of our warrants outstanding is subject to potentially material increases and decreases based on fluctuations in the price of our common stock, which may affect our results of operations and financial position and could adversely affect our stock price.
- We are a clinical-stage biotechnology company with a limited operating history and no products approved for commercial sale. We have a history of operating losses, and we expect to continue to incur losses and may never be profitable, which together with our limited operating history, makes it difficult to assess our future viability.

#### **Risks Related to the Discovery, Development and Commercialization of our Product Candidates**

- We will be substantially dependent on the success of our product candidates and cannot guarantee that these product candidates will successfully complete development, receive regulatory approval or be successfully commercialized.
- We are developing product candidates in combination with other therapies, which exposes us to additional risks.
- We may choose to expend our limited resources on programs that do not yield successful product candidates as opposed to indications that may be more profitable or for which there is a greater likelihood of success.
- Our projections regarding the market opportunities for our product candidates may not be accurate, and the actual market for our products, if approved, may be smaller than we estimate.
- Our clinical trials may fail to adequately demonstrate the safety and efficacy of our product candidates, which would prevent or delay regulatory approval and commercialization. If our trials are not successful, we will be unable to commercialize our product candidates.



### **Risks Related to Reliance on Third Parties**

- We have limited experience conducting clinical trials and have relied and will rely on third parties and related parties to conduct many of our preclinical studies and clinical trials, to manufacture products and to perform many essential services for any products that we commercialize, including services related to distribution, government price reporting, customer service, accounts receivable management, cash collection and adverse event reporting. Any failure by a third party, related party, or by us to perform as expected, to comply with legal and regulatory requirements or to conduct the clinical trials according to Good Clinical Practice (GCP) regulations, and in a timely manner, may delay or prevent our ability to seek or obtain regulatory approval for or commercialization of our product candidates and our ability to commercialize our current or future product candidates will be significantly impacted and we may be subject to regulatory sanctions.
- If third-party manufacturers, wholesalers and distributors fail to perform as expected, or fail to devote sufficient time and resources to our product candidates, our clinical development may be delayed, our costs may be higher than expected or our product candidates may fail to be approved, or we may fail to commercialize any product candidates if approved.
- We use the Clinic, a related party, in some of our clinical trials which may expose us to significant regulatory risks. If our data for this site is not sufficiently robust or if there are any data integrity issues, we may be required to repeat such studies or required to contract with other clinical trial sites, and our clinical development plans will be significantly delayed, and we will incur additional costs.
- We have formed, and may in the future form or seek, strategic alliances or enter into collaborations with third parties or additional licensing arrangements in the future, and we may not realize the benefits of such alliances or licensing arrangements. If we fail to enter into such strategic alliances, collaborations or licensing arrangements, or such strategic alliances, collaborations or licensing arrangements are not successful, we may not be able to capitalize on the market potential of our product candidates.
- If conflicts arise between us and our collaborators or strategic partners, these parties may act in a manner adverse to us and could limit our ability to implement our strategies.

### **Risks Related to Healthcare and Other Government Regulations**

- We may be unable to obtain U.S. or foreign regulatory approval and, as a result, be unable to commercialize our product candidates. We are, and if we receive regulatory approval of our product candidates, will continue to be subject to ongoing extensive regulation, regulatory obligations and continued regulatory review, which may result in significant additional expense.
- Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of our product candidates in other jurisdictions.
- Even if we receive regulatory approval for our product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease, or any other product candidates, they will be subject to ongoing regulatory requirements, which may result in significant additional expenses. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions, and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates.
- If we are unable to establish sales, marketing and distribution capabilities, we may not be successful commercializing our product candidates if and when they are approved.
- Problems related to large scale commercial manufacturing could cause delays in product launches, an increase in costs or shortages of product candidates.

### **Risks Related to Intellectual Property**

- If we are unable to obtain, maintain, protect and enforce patent protection and other proprietary rights for our product candidates and technologies, we may not be able to compete effectively or operate profitably and our ability to prevent our competitors from commercializing similar or identical technology and product candidates would be adversely affected.
- If any of our owned or in-licensed patent applications do not issue as patents in any jurisdiction, we may not be able to compete effectively.
- We or our licensors, collaborators, or any future strategic partners may become subject to third-party claims or litigation alleging infringement of patents or other proprietary rights or seeking to invalidate patents or other proprietary rights, and we may need to resort to litigation to protect or enforce our patents or other intellectual property or the patents or other intellectual property of our licensors, all of which could be expensive, time-consuming and unsuccessful, may delay or prevent the development and commercialization of our product candidates, or may put our patents and other proprietary rights at risk.
- The use of our technology and product candidates could potentially conflict with the rights of others, and third-party claims of intellectual property infringement, misappropriation or other violation against us, our licensors or our collaborators may prevent or delay the development and commercialization of our product candidates and technologies.
- Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.

### **Risks Related to Our Common Stock and CVRs**

- Dr. Soon-Shiong, our Executive Chairman, Global Chief Scientific and Medical Officer and our principal stockholder, has significant interests in other companies which may conflict with our interests.
- Dr. Soon-Shiong, through his voting control of the company, has the ability to control actions that require stockholder approval.
- The market price of our common stock has been and may continue to be volatile, and investors may have difficulty selling their shares.

### **Risks Related to Our Limited Operating History, Financial Condition and Capital Requirements**

***We will need additional financing to fund our operations and complete the development and commercialization of our various product candidates, and if we are unable to obtain such financing when needed, or on acceptable terms, we may be unable to complete the development and commercialization of our product candidates.***

The development of biopharmaceutical products, including conducting preclinical studies and clinical trials, is a very time-consuming, expensive and uncertain process that takes years to complete. Our operations have consumed substantial amounts of cash since inception. A significant portion of our funding had been in the form of promissory notes totaling \$769.9 million in indebtedness (consisting of related-party promissory notes and accrued and unpaid interest) as of March 31, 2023 held by entities affiliated with Dr. Soon-Shiong.

As of March 31, 2023, we held cash, cash equivalents and marketable securities totaling \$92.1 million. We will need to obtain additional financing to fund our future operations, including completing the development and commercialization of our product candidates. Changing circumstances may cause us to increase our spending significantly faster than we currently anticipate and we may need to raise additional funds sooner than we presently anticipate. Moreover, research and development and our operating costs and fixed expenses such as rent and other contractual commitments, including those for our research collaborations, are substantial and are expected to increase in the future.

Unless and until we can generate a sufficient amount of revenues, we may finance future cash needs through public or private equity offerings, license agreements, debt financings, collaborations, strategic alliances and marketing or distribution arrangements. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms, or at all.

To the extent that we raise additional capital through the sale of equity or equity-linked securities (including warrants) convertible debt, or through the ATM, the shelf registration statement or other offerings, or if any of our current debt is converted into equity, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. The incurrence of additional indebtedness would result in increased fixed payment obligations and could involve certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we raise additional funds through strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms unfavorable to us. We have no committed source of additional capital and if we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may be required to delay or reduce the scope of or eliminate one or more of our research or development programs or our commercialization efforts. Our current license and collaboration agreements may also be terminated if we are unable to meet the payment obligations under those agreements. As a result, we may seek to access the public or private capital markets whenever conditions are favorable, even if we do not have an immediate need for additional capital at that time.

***Our debt could adversely affect our cash flows and limit our flexibility to raise additional capital.***

We have a significant amount of debt and may need to incur additional debt to support our growth. As of March 31, 2023, our indebtedness totals \$769.9 million, (consisting of related-party promissory notes and accrued and unpaid interest), held by entities affiliated with Dr. Soon-Shiong.

Our substantial amount of debt could have important consequences and could:

- require us to dedicate a substantial portion of our cash and cash equivalents to make interest and principal payments on our debt, reducing the availability of our cash and cash equivalents and cash flow from operations to fund future capital expenditures, working capital, execution of our strategy and other general corporate requirements;
- increase our cost of borrowing and even limit our ability to access additional debt to fund future growth;
- increase our vulnerability to general adverse economic and industry conditions and adverse changes in governmental regulations;
- limit our flexibility in planning for, or reacting to, changes in our business and industry, which may place us at a disadvantage compared with our competitors; and
- limit our ability to borrow additional funds, even when necessary to maintain adequate liquidity, which would also limit our ability to further expand our business.

The occurrence of any of the foregoing factors could have a material adverse effect on our business, results of operations and financial condition.

Further, the company's ability to make scheduled payments of the principal of, to pay interest on, or to refinance any current or future indebtedness, including the related-party promissory notes, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not generate sufficient cash flows from operations in the future to service our indebtedness and make necessary capital expenditures. If we are unable to generate such cash flows, we may be required to adopt one or more alternatives, such as selling assets, restructuring indebtedness or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness, at maturity or otherwise, will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

There can be no assurance that we can refinance these promissory notes or what terms will be available in the market at the time of refinancing. Furthermore, if prevailing interest rates or other factors at the time of refinancing result in higher interest rates upon refinancing, then the interest expense relating to the refinanced indebtedness would increase. These risks could materially adversely affect our financial condition, cash flows and results of operations.

***Conversion of certain related-party notes may dilute the ownership interest of existing stockholders or may otherwise depress the price of our common stock.***

As of March 31, 2023, the company currently has promissory notes totaling an aggregate of \$769.9 million, (consisting of related-party promissory notes and accrued and unpaid interest) held by entities affiliated with Dr. Soon-Shiong (some of which are convertible under certain circumstances), including variable-rate promissory notes in an aggregate amount of \$505.0 million that become due and payable on December 31, 2023, and fixed-rate promissory notes in an aggregate amount of \$264.9 million (consisting of principal and accrued and unpaid interest) that become due and payable on September 30, 2025.

In the event of a default on the \$300.0 million loan (as defined in the promissory note), including if the company does not repay the loan at maturity, the company has the right, at its sole option, to convert the outstanding principal amount of accrued and unpaid interest due under this note into shares of the company's common stock at a price of \$5.67 per share.

Additionally, the March 31, 2023 \$30.0 million promissory note and accrued interest may be converted in whole at the option of the noteholder following the Conversion Price Date, which is the trading day prior to the opening of the next open trading window, as determined by the company's board of directors in accordance with the company's Insider Trading Policy. The conversion price is equal to the greater of (i) the NASDAQ Official Closing Price and (ii) the consolidated closing bid price of the company's common stock on the Conversion Price Date. There is no floor on the conversion price for this convertible note, therefore, as of March 31, 2023 we cannot determine the total number of shares issuable upon conversion that may occur in the future.

The terms of the fixed-rate promissory notes were amended and restated on August 31, 2022 to include a conversion feature that gives each lender the right at any time, at its sole option (other than when the lender is in receipt of a written notice of prepayment from the borrower), the right to convert the entire outstanding principal amount and accrued and unpaid interest due under each note at the time of conversion into shares of the company's common stock at a price of \$5.67 per share. Upon receipt of a written notice of prepayment from the borrower, the lender has the right, at its option, to convert the outstanding principal amount to be prepaid and the accrued and unpaid interest thereon (as specified in the notice of prepayment) into shares of the company's common stock at a price of \$5.67 per share.

The conversion of some or all of the aforementioned promissory notes, to the extent we deliver shares upon conversion, at a time when the company's common stock is valued at greater than \$5.67 per share would dilute the ownership interests of existing stockholders. Any sales in the public market of the promissory notes or our common stock issuable upon conversion of the promissory notes could adversely affect prevailing market prices of our common stock

***The accounting method for convertible debt securities could have a material effect on our reported financial results.***

In accordance with ASC 470-50, *Debt – Modifications and Extinguishments*, we recorded the amendments to our related-party promissory notes entered into on August 31, 2022 under the extinguishment accounting model, as the amendments to the fixed-rate promissory notes added a substantive conversion option to the debt. Under this model, the company calculated a gain on extinguishment of \$82.9 million, representing the difference between the fair value of the new and amended promissory notes and the carrying value of the extinguished debt, net of any unamortized related-party notes discounts plus the cash proceeds from the new promissory note. Since the debt was obtained from entities under common control, such gain was recorded in *additional paid-in capital*, on the condensed consolidated statement of stockholders' deficit for the three months ended March 31, 2023. Also, the difference between the principal and accrued interest outstanding as of the date of amendment and the fair value of the new and amended promissory notes was recorded as a debt discount to be amortized as interest expense over the remaining term (or until conversion). As a result, we will be required to record a greater amount of non-cash interest expense in current periods presented as a result of the amortization of the discounted carrying value of the promissory notes to their face amount over the term of such notes. We will report lower net income in our consolidated financial results because ASC 470-20, *Debt with Conversion and Other Options*, requires interest to include both the current period's amortization of the debt discount and the instrument's coupon interest, which could adversely affect our reported or future financial results and the trading price of our common stock.

In August 2020, the FASB issued ASU 2020-06, *Debt – Debt with Conversion and Other Options (Subtopic 470-20)*, to reduce complexity in applying U.S. GAAP to certain financial instruments with characteristics of liability and equity. In addition, the new guidance requires diluted earnings per share (diluted EPS) calculations be prepared using the if-converted method instead of the treasury stock method. Under the if-converted method, the denominator of the diluted EPS calculation is adjusted to reflect the full number of common shares issuable upon conversion, assuming the effect is dilutive, while the numerator is adjusted to add back interest expense (after-tax) for the period. Also, the new guidance eliminated the ability to overcome the presumption of share settlement. The company adopted this statement effective January 1, 2022.

***The value of our warrants outstanding is subject to potentially material increases and decreases based on fluctuations in the price of our common stock, which may affect our results of operations and financial position and could adversely affect our stock price.***

In December 2022, we completed a registered direct offering of 9,090,909 shares, raising approximately \$47.0 million in net proceeds. In connection with the sale of our common stock, we entered into a warrant agreement that allows the investor to purchase up to 9,090,909 shares at an exercise price of \$6.60 per share. The warrants are immediately exercisable and expire two years after the initial issuance date.

In February 2023, we completed a registered direct offering of 14,072,615 shares, raising approximately \$47.0 million in net proceeds. In connection with the sale of our common stock, we entered into a warrant agreement that allows the investors to purchase up to 14,072,615 shares at an exercise price of \$4.26 per share. The warrants are immediately exercisable and expire two years after the initial issuance date.

We account for the warrants as a derivative instrument, and changes in the fair value of the warrants are included in *other income (expense), net*, on the condensed consolidated statement of operations for each reporting period. At March 31, 2023, the fair value of warrant liabilities included in the company's condensed consolidated balance sheet was \$17.8 million. We used the Black-Scholes option pricing model to determine the fair value of the warrants. As a result, the valuation of this derivative instrument is subjective, and the Black-Scholes option pricing model requires the input of highly subjective assumptions, including the expected stock price volatility and probability of a fundamental transaction (a strategic merger or sale). Changes in these assumptions can materially affect the fair value estimate. We could, at any point in time, ultimately incur amounts different than the carrying value, which could have a significant impact on our results of operations and financial position.

The fluctuations of warrant value and changes in the assumptions and factors used in the model may impact our operating results, making it difficult to forecast our operating results and making period-to-period comparisons less predictive of future performance. In one or more future quarters, our results of operations may fall below the expectations of securities analysts and investors. In that event, the market price of our common stock could decline. In addition, the market price of our common stock may fluctuate or decline regardless of our operating performance.

***We are a clinical-stage biotechnology company with a limited operating history and no products approved for commercial sale. We have a history of operating losses, and we expect to continue to incur losses and may never be profitable, which together with our limited operating history, makes it difficult to assess our future viability.***

We are a clinical-stage biotechnology company with a limited operating history upon which you can evaluate our business and prospects, and we have a broad portfolio of product candidates at various stages of development. None of our products have been approved for commercial sale, and we have not generated any revenue from product sales, although we have generated revenues from non-exclusive license agreements related to our cell lines, the sale of our bioreactors and related consumables and grant programs. In addition, we have limited experience and have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the biotechnology industry, including in connection with obtaining marketing approvals, manufacturing a commercial-scale product or arranging for a third party to do so on our behalf or conducting sales and marketing activities necessary for successful product commercialization. Because of the numerous risks and uncertainties associated with our product development efforts, we are unable to predict when we may become profitable, if at all.

Since the commencement of our operations, we have incurred significant losses each year, and, as of March 31, 2023 we had an accumulated deficit of \$2.5 billion. We expect to continue to incur significant expenses as we seek to expand our business, including in connection with conducting research and development across multiple therapeutic areas, participating in clinical trial activities, continuing to acquire or in-license technologies, maintaining, protecting and expanding our intellectual property, seeking regulatory approvals, increasing our manufacturing capabilities and, upon successful receipt of FDA approval, commercializing our products. Moreover, we do not expect to have significant product sales or revenue in the near term, if ever.

If we are required by the FDA or any equivalent foreign regulatory authority to perform clinical trials or studies in addition to those we currently expect to conduct, or if there are any delays in completing the clinical trials of our product candidates, our expenses could increase substantially. We have submitted a BLA for our product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease, which was accepted by the FDA for review with a target PDUFA action date of May 23, 2023. On May 9, 2023, the FDA delivered a complete response letter to us regarding the BLA, as described in greater detail in Part I, Item 2 “[Management’s Discussion and Analysis—Subsequent Events](#).” It is unclear when the FDA will approve our BLA, if at all, for commercialization and even if approved, the resulting revenue may not enable us to achieve profitability. Even if we obtain regulatory approval to market a product candidate, our future revenues will depend upon the size of any markets in which our product candidates have received approval, and our ability to achieve sufficient market acceptance, reimbursement from third-party payors and adequate market share for our product candidates in those markets.

We expect our expenses and net losses to increase significantly as we prepare to potentially commercialize our product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease, if approved by the FDA, continue our development of, and seek regulatory approvals for, our other product candidates, and begin to commercialize other approved products, if any, as well as hire additional personnel, protect our intellectual property and incur additional costs associated with operating as a public company. Our net losses may fluctuate significantly from quarter to quarter and year to year, depending on the timing of our clinical studies and trials, associated manufacturing needs, commercialization activities if our product candidates are approved and our expenditures on other research and development activities.

If our research and development efforts are successful, we may also face the risks associated with the shift from development to commercialization of new products based on innovative technologies. Our ability to achieve profitability, if ever, is dependent upon, among other things, obtaining regulatory approvals for our product candidates and successfully commercializing our product candidates alone or with third parties. However, our operations may not be profitable even if one or more of our product candidates under development are successfully developed and produced and thereafter commercialized. Even if we do become profitable, we may not be able to sustain or increase our profitability on a quarterly or annual basis. As a result, it may be more difficult for you to assess our future viability than it could be if we had a longer operating history.

***We invest our cash on hand in various financial instruments which are subject to risks that could adversely affect our business, results of operations, liquidity and financial condition.***

We invest our cash in a variety of financial instruments, principally commercial paper, corporate debt securities and government bonds. All of these investments are subject to credit, liquidity, market and interest rate risk. Such risks, including the failure or severe financial distress of the financial institutions that hold our cash, cash equivalents and investments, may result in a loss of liquidity, impairment to our investments, realization of substantial future losses, or a complete loss of the investments in the long-term, which may have a material adverse effect on our business, results of operations, liquidity and financial condition. In order to manage the risk to our investments, we maintain an investment policy that, among other things, limits the amount that we may invest in any one issue or any single issuer and requires us to only invest in high credit quality securities to preserve liquidity.

***Our ability to use NOLs and research and development credits to offset future taxable income may be subject to certain limitations.***

In general, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-change NOLs or credits, to offset future taxable income or taxes. For these purposes, an ownership change generally occurs where the aggregate stock ownership of one or more stockholders or groups of stockholders who owns at least 5% of a corporation’s stock increases its ownership by more than 50 percentage points over its lowest ownership percentage within a specified testing period. We have not conducted a complete study to assess whether a change of control has occurred or whether there have been multiple changes of control since inception due to the significant complexity and cost associated with such a study. If we have experienced a change of control, as defined by Section 382, at any time since inception (including as a result of the Merger), utilization of the NOL carryforwards or research and development tax credit carryforwards would be subject to an annual limitation under Section 382. Any limitation may result in expiration of a portion of the NOL carryforwards or research and development tax credit carryforwards before utilization. In addition, our NOLs or credits may also be impaired under state law. Accordingly, we may not be able to utilize a material portion of our NOLs or credits.

Since we will need to raise substantial additional funding to finance our operations, we may experience further ownership changes in the future, some of which may be outside of our control. Limits on our ability to use our pre-change NOLs or credits to offset U.S. federal taxable income could potentially result in increased future tax liability to us if we earn net taxable income in the future. In addition, under the legislation commonly referred to as the Tax Cuts and Jobs Act of 2017 (TCJA), as modified by the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), the amount of NOLs generated in taxable periods beginning after December 31, 2017, that we are permitted to deduct in any taxable year beginning after December 31, 2020 is limited to 80% of our taxable income in such year, where taxable income is determined without regard to the NOL deduction itself. The TCJA allows post-2017 unused NOLs to be carried forward indefinitely. Similar rules may apply under state tax laws.

***Our transfer pricing policies may be subject to challenge by the Internal Revenue Service or other taxing authorities.***

Our intercompany relationships are subject to complex transfer pricing regulations administered by taxing authorities in various jurisdictions. The relevant taxing authorities may disagree with our determinations as to the value of assets sold or acquired or income and expenses attributable to specific jurisdictions. If such a disagreement were to occur, and our position were not sustained, we could be required to pay additional taxes, interest and penalties, which could result in one-time tax charges, higher effective tax rates, reduced cash flows, and lower overall profitability of our operations. We believe that our consolidated financial statements reflect adequate reserves to cover such a contingency, but there can be no assurances in that regard.

## **Risks Related to the Discovery, Development and Commercialization of our Product Candidates**

***We will be substantially dependent on the success of our product candidates and cannot guarantee that these product candidates will successfully complete development, receive regulatory approval or be successfully commercialized.***

From inception through the date of this Quarterly Report on Form 10-Q, we have generated minimal revenue from non-exclusive license agreements related to our cell lines, the sale of our bioreactors and related consumables, and grant programs. We have no clinical products approved for commercial sale and have not generated any revenue from therapeutic and vaccine product candidates that are under development. In May 2022, we announced the submission of a BLA to the FDA for our product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease. In July 2022, we announced that the FDA had accepted our BLA for review and set a target PDUFA action date of May 23, 2023. On May 9, 2023, the FDA delivered a complete response letter to us regarding the BLA, as described in greater detail in Part I, Item 2 “*Management’s Discussion and Analysis—Subsequent Events*.” It is unclear when the FDA will approve our BLA, if at all. We have invested a significant portion of our efforts and financial resources in the development of our main product candidates, N-803, our novel antibody cytokine fusion protein, saRNA and second-generation hAd5 vaccine candidates, and aldoxorubicin, some of which are used in combination with our NK cell therapy candidates. Our product candidates will require additional clinical and non-clinical development, regulatory approval, commercial manufacturing arrangements, establishment of a commercial organization, significant marketing efforts, and further investment before we can generate any revenues from product sales. We expect to invest heavily in these product candidates as well as in our other existing product candidates and in any future product candidates that we may develop. Our product candidates are susceptible to the risks of failure inherent at any stage of product development, including the appearance of unexpected adverse events or failure to achieve primary endpoints in clinical trials. Furthermore, we cannot assure you that we will meet our timelines for current or future clinical trials, which may be delayed or not completed for a number of reasons. Additionally, our ability to generate revenues from our combination therapy products will also depend on the availability of the other therapies with which our products are intended to be used. We currently generate no meaningful revenues from the sale of any product candidates, and we may never be able to develop or commercialize a product.

***We are developing product candidates in combination with other therapies, which exposes us to additional risks.***

We are developing product candidates in combination with one or more other therapies. We are studying N-803 therapy along with other products and product candidates, such as BCG, PD-L1 t-haNK, hAd5 and yeast tumor-associated antigens (TAAs), and aldoxorubicin. If we choose to develop a product candidate for use in combination with an approved therapy, we are subject to the risk that the FDA, EMA or comparable foreign regulatory authorities in other jurisdictions could revoke approval of, or that safety, efficacy, manufacturing or supply issues could arise with the therapy used in combination with our product candidate. The FDA may require us to use more complex clinical trial designs in order to evaluate the contribution of each product and product candidate to any observed effects. To the extent that we do not have rights to already approved products, this may require us to work with another company to satisfy such a requirement or increase our cost of development. It is possible that the results of these trials could show that any positive results are attributable to the already approved product. Following product approval, the FDA may require that products used in conjunction with each other be cross labeled for combined use. If the therapies we use in combination with our product candidates are replaced as the standard of care for the indications we choose for any of our product candidates, the FDA or comparable foreign regulatory authorities may require us to conduct additional clinical trials. The occurrence of any of these risks could result in our own products, if approved, being removed from the market or being less successful commercially.

In addition, unapproved therapies face the same risks described with respect to our product candidates currently in development and clinical trials, including the potential for serious adverse effects, delays in clinical trials and lack of FDA approval. If the FDA or comparable foreign regulatory authorities do not approve or revoke their approval of these other therapies, or if safety, efficacy, quality, manufacturing or supply issues arise with, the therapies we choose to evaluate in combination with any of our product candidates, we may be unable to obtain approval of or market such combination therapy.



***We may choose to expend our limited resources on programs that do not yield successful product candidates as opposed to indications that may be more profitable or for which there is a greater likelihood of success.***

We do not have sufficient resources to pursue development of all or even a substantial portion of the potential opportunities that we believe will be afforded to us by our product candidates. Because we have limited resources and access to capital to fund our operations, our management must make strategic decisions as to which product candidates and indications to pursue and how much of our resources to allocate to each. Our management must also evaluate the benefits of developing in-licensed or jointly owned technologies, which in some circumstances we may be contractually obligated to pursue, relative to developing other product candidates, indications or programs. Our management has broad discretion to suspend, scale down, or discontinue any or all of these development efforts, or to initiate new programs to treat other diseases. If we select and commit resources to opportunities that we are unable to successfully develop, or we forego more promising opportunities, our business, financial condition and results of operations will be adversely affected.

***Our projections regarding the market opportunities for our product candidates may not be accurate, and the actual market for our products, if approved, may be smaller than we estimate.***

Since our current product candidates and any future product candidates will represent novel approaches to treating various conditions, it may be difficult, in any event, to accurately estimate the potential revenues from these product candidates. Accordingly, we may spend significant capital trying to obtain approval for product candidates that have an uncertain commercial market. Our projections of addressable patient populations that may benefit from treatment with our product candidates are based on our beliefs and estimates. These estimates, which have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations, or market research by third parties, may prove to be incorrect. Further, new studies or approvals of new therapeutics may change the estimated incidence or prevalence of these diseases. The number of patients may turn out to be lower than expected. Additionally, the potentially addressable patient population for our product candidates may be limited or may not be amenable to treatment with our product candidates and may also be limited by the cost of our treatments and the reimbursement of those treatment costs by third-party payors. Even if we obtain significant market share for our product candidates, because the potential target populations may be small, we may never achieve profitability without obtaining regulatory approval for additional indications.

***Our clinical trials may fail to adequately demonstrate the safety and efficacy of our product candidates, which would prevent or delay regulatory approval and commercialization. If our trials are not successful, we will be unable to commercialize our product candidates.***

Our research and development programs are at various stages of development. The clinical trials of our product candidates as well as the manufacturing and marketing of our product candidates will be subject to extensive and rigorous review and regulation by numerous government authorities in the U.S. and in other countries where we intend to test and market our product candidates. Before obtaining regulatory approvals for the commercial sale of any of our product candidates, we must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that our product candidates are safe, pure, and potent for use in their target indications. Each product candidate must demonstrate an adequate risk versus benefit profile in its intended patient population and for its intended use. The risk/benefit profile required for product licensure will vary depending on these factors and may include not only the ability to show tumor shrinkage, but also adequate duration of response, a delay in the progression of the disease, and/or an improvement in survival. For example, response rates from the use of our product candidates may not be sufficient to obtain regulatory approval unless we can also show an adequate duration of response. The clinical trials for our product candidates under development may not be completed on schedule and regulatory authorities may ultimately disagree with our chosen endpoints or may find that our studies or study results do not support product approval and we cannot guarantee that the FDA or foreign regulatory authorities will interpret the results as we do or accept the therapeutic effects as valid endpoints in clinical trials necessary for market approval or they may find that our clinical trial design or conduct does not meet the applicable approval requirement and more trials could be required before we submit our product candidates for approval. Success in early clinical trials does not ensure that large-scale clinical trials will be successful, nor does it predict final results. Product candidates in later stages of clinical trials may fail to show the desired safety, tolerability and efficacy traits despite having progressed through preclinical studies and initial clinical trials and after reviewing test results, we or our collaborators may abandon projects that we might previously have believed to be promising.

In addition, we do not have data on possible harmful long-term effects of our product candidates and do not expect to have this data in the near future. As a result, our ability to generate clinical safety and effectiveness data sufficient to support submission of a marketing application or commercialization of our product candidates is uncertain and is subject to significant risk.

***Interim, initial, “top-line” and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient 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 publicly disclose preliminary, interim or top-line data from our preclinical studies and clinical trials, which are based on preliminary analyses of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. 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 or as patients from our clinical trials continue other treatments for their disease. We also may 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 interim, top-line or preliminary 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. 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, top-line data should be viewed with caution until the final data are available. Adverse differences between preliminary or interim data and final data could significantly harm our business prospects. Further, disclosure of interim data by us or by our competitors could result in volatility in the price of our common stock.

In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is typically selected from a more extensive amount of available information, and you or others may not agree with what we determine is material or otherwise appropriate information to include in our disclosure. If the interim, top-line or preliminary data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our product candidates may be harmed, which could harm our business, operating results, prospects or financial condition.

***Our clinical trials may not be initiated or completed when we expect, or at all, they may take longer and cost more to complete than we project, our clinical trial costs may be higher than for more conventional therapeutic technologies or drug products, and we may be required to conduct additional clinical trials or modify current or future clinical trials based on feedback we receive from the FDA.***

We cannot guarantee that any current or future clinical trials will be conducted as planned or completed on schedule, if at all, or that any of our product candidates will receive regulatory approval. A failure of one or more clinical trials can occur at any stage of the clinical trial process, other events may cause us to temporarily or permanently stop a clinical trial, and our future clinical trials may not be successful.

Because our product candidates include, and we expect our future product candidates to include, candidates based on advanced therapy technologies, we expect that they will require extensive research and development and have substantial manufacturing costs. In addition, costs to treat patients and to treat potential side effects that may result from our product candidates can be significant. Some clinical trial sites may not bill, or obtain coverage from Medicare, Medicaid, or other third-party payors for some or all of these costs for patients enrolled in our clinical trials, and clinical trial sites outside of the U.S. may not reimburse for costs typically covered by third-party payors in the U.S., and as a result we may be required by those trial sites to pay such costs. Accordingly, our clinical trial costs are likely to be significantly higher per patient than those of more conventional therapeutic technologies or drug products.

Collaborations with other entities may be subject to additional delays because of the management of the trials, contract negotiations, the need to obtain agreement from multiple parties and the necessity of obtaining additional approvals for therapeutics used in the combination trials. These combination therapies will require additional testing and clinical trials will require additional FDA regulatory approval and will increase our future costs.

Any inability to successfully complete preclinical and clinical development could result in additional costs to us, slow down our product development and approval process or impair our ability to commence product sales and generate revenues. In addition, if we make manufacturing changes to our product candidates, we may be required to, or we may elect to, conduct additional trials to bridge our modified product candidates to earlier versions. These changes may require FDA approval or notification and may not have their desired effect. The FDA may also not accept data from prior versions of the product to support an application, delaying our clinical trials or programs or necessitating additional clinical trials or preclinical studies. We may find that this change has unintended consequences that necessitates additional development and manufacturing work, additional clinical and preclinical studies, or that results in refusal to file or non-approval of a BLA and/or NDA.

Clinical trial delays could shorten any periods during which our product candidates have patent protection and may allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business and results of operations. In addition, we have in the past experienced clinical holds imposed upon certain of our or investigator-led clinical trials for various reasons, and we may experience further clinical trial holds in the future. If we fail to commence or complete, or experience delays in, any of our planned clinical trials, our stock price and our ability to conduct our business as currently planned could be harmed.

***Even if one of our product candidates is approved and commercialized, we may not become profitable.***

If approved for marketing by applicable regulatory authorities, our ability to generate revenues from our product candidates will depend on our ability to:

- price our product candidates competitively such that third-party and government reimbursement leads to broad product adoption;
- prepare a broad network of clinical sites for administration of our product;
- create market demand for our product candidates through our own marketing and sales activities, and any other arrangements to promote these product candidates that we may otherwise establish;
- receive regulatory approval for the targeted patient population(s) and claims that are necessary or desirable for successful marketing;
- manufacture product candidates through CMOs or in our own, or our affiliates', manufacturing facilities in sufficient quantities and at acceptable quality and manufacturing cost to meet commercial demand at launch and thereafter;
- establish and maintain agreements with wholesalers, distributors, pharmacies, and group purchasing organizations on commercially reasonable terms;
- obtain, maintain, protect and enforce patent and other intellectual property protection and regulatory exclusivity for our product candidates;
- successfully commercialize any of our product candidates that receive regulatory approval;
- maintain compliance with applicable laws, regulations, and guidance specific to commercialization including interactions with health care professionals, patient advocacy groups, and communication of health care economic information to payors and formularies;
- achieve market acceptance of our product candidates by patients, the medical community, and third-party payors;
- achieve appropriate reimbursement for our product candidates;
- maintain a distribution and logistics network capable of product storage within our specifications and regulatory guidelines, and further capable of timely product delivery to commercial clinical sites;
- effectively compete with other therapies or competitors; and
- following launch, assure that our product will be used as directed and that additional unexpected safety risks will not arise.

Even if the FDA approves N-803 for certain indications or in combination with other therapeutic products, and even if we obtain significant market share for it, because the potential target population may be small, we may never achieve profitability without obtaining regulatory approval for additional indications. The FDA often approves new therapies initially only for use in patients with r/r metastatic disease, which may limit our patient population. Additionally, we may not be able to obtain the labeling claims necessary or desirable for the promotion of our product candidates

In connection with our 2017 acquisition of Altor, we issued CVRs under which we agreed to pay the prior stockholders of Altor approximately \$304.0 million of contingent consideration upon the successful regulatory approval of a BLA by the FDA, or foreign equivalent, for N-803 by December 31, 2022, and approximately \$304.0 million of contingent consideration upon calendar-year worldwide net sales of N-803 exceeding \$1.0 billion prior to December 31, 2026 with amounts payable in cash or shares of our common stock or a combination thereof.

With respect to the regulatory milestone CVR agreement, in May 2022 we announced the submission of a BLA to the FDA for our product candidate, Anktiva (N-803) in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease. In July 2022 we announced that the FDA had accepted our BLA for review and set a target PDUFA action date of May 23, 2023. On May 9, 2023, the FDA delivered a complete response letter to us regarding the BLA, as described in greater detail in Part I, Item 2 “*Management’s Discussion and Analysis—Subsequent Events*.” It is unclear when the FDA will approve our BLA, if at all. The FDA did not approve our BLA on or before December 31, 2022, and therefore the regulatory milestone was not met, and the regulatory milestone CVR agreement terminated in accordance with its terms.

With respect to the net sales milestone CVR agreement, as of December 31, 2022, Dr. Soon-Shiong and his related party hold approximately \$139.8 million of net sales CVRs and they have both irrevocably agreed to receive shares of the company’s common stock in satisfaction of their CVRs. We may be required to pay the other prior Altor stockholders up to \$164.2 million for their net sales CVRs should they choose to have their CVRs paid in cash instead of common stock. If this were to occur, we may need to seek additional sources of capital, and we may not be able to achieve profitability or positive cash flow.

We plan to collaborate with governmental, academic and corporate partners, including affiliates, to improve and develop N-803, hAd5 and other therapies for new indications for use in combination with other therapies and to improve and develop other product candidates, which may expose us to additional risks, or we may not realize the benefits of such collaborations.

***If we encounter delays or difficulties enrolling and/or maintaining patients in our clinical trials, our clinical development activities and receipt of necessary marketing approvals could be delayed or otherwise adversely affected.***

The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the trial until its conclusion. We may experience difficulties or delays in patient enrollment and retention in our clinical trials for a variety of reasons.

Because the number of qualified clinical investigators is limited, we may need to conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials at such clinical trial sites. Moreover, because our product candidates represent a departure from more commonly used methods for cancer and/or viral disease treatment, potential patients and their doctors may be inclined to use conventional therapies, such as chemotherapy and approved immunotherapies that have established safety and efficacy profiles, rather than enroll patients in any future clinical trial.

Delays or failures in planned patient enrollment or retention may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of our product candidates, or could render further development impossible.

***Our product candidates may cause undesirable side effects or have other properties that could halt their clinical development, delay or prevent their regulatory approval, limit their commercial potential or result in significant negative consequences.***

Results of our trials could reveal a high and unacceptable severity and prevalence of side effects, adverse events or unexpected characteristics. Combination immunotherapy that includes our current product candidates may be associated with more frequent adverse events or additional adverse events. Undesirable side effects or unacceptable toxicities caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials or order our clinical trials to be placed on clinical hold, and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other regulatory authorities for any or all targeted indications. The FDA or comparable foreign regulatory authorities may also require additional data, clinical trials, or preclinical studies should unacceptable toxicities arise. We may need to abandon development or limit development of that product candidate to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk/benefit perspective. Toxicities associated with our clinical trials and product candidates may also negatively impact our ability to conduct clinical trials using tumor-infiltrating lymphocyte therapy in larger patient populations, such as in patients that have not yet been treated with other therapies or have not yet progressed on other therapies. Even if we were to receive product approval, such approval could be contingent on inclusion of unfavorable information in our product labeling, such as limitations on the indicated uses for which the products may be marketed or distributed, a label with significant safety warnings, including boxed warnings, contraindications, and precautions, a label without statements necessary or desirable for successful commercialization, or requirements for costly post marketing testing and surveillance, or other requirements, including a Risk Evaluation and Mitigation Strategy (REMS) to monitor the safety or efficacy of the products, and in turn prevent us from commercializing and generating revenues from the sale of our current or future product candidates. In addition, these serious adverse effects may not be appropriately recognized or managed by the treating medical staff, as toxicities resulting from our product candidates are not normally encountered in the general patient population and by medical personnel. They may have difficulty observing patients and treating toxicities, which may be more challenging due to personnel changes, shift changes, house staff coverage or related issues. This could lead to more severe or prolonged toxicities or even patient deaths, which could result in us or the FDA delaying, suspending or terminating one or more of our clinical trials and which could jeopardize regulatory approval. Any of these occurrences may materially harm our business, financial condition and prospects.

***The manufacture of our product candidates is complex, and we may encounter difficulties in production, particularly with respect to process development, quality control, or scaling-up of our manufacturing capabilities. If we or our related parties, or any of our third-party manufacturers encounter such difficulties, our ability to provide adequate supply of our product candidates for clinical trials or our products for patients, if approved, could be delayed or stopped, or we may be unable to maintain a commercially viable cost structure.***

The manufacture of our product candidates involves complex processes, especially for our biologics, vectors and cell therapy product candidates, which are complex, highly regulated and subject to multiple risks. As a result of the complexities, the cost to manufacture biologics, vectors and cell therapies is generally higher than traditional small molecule chemical compounds, and the manufacturing process is less reliable and is more difficult to reproduce. The manufacture of cell therapy products requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of cell therapy products often encounter difficulties in production, particularly in scaling up initial production. These problems include difficulties with production costs and yields, quality control, including stability of the product candidate and quality assurance testing, shortages of qualified personnel and compliance with strictly enforced federal, state, local and foreign regulations. We may also find that the manufacture of our product candidates is more difficult than anticipated, resulting in an inability to produce a sufficient amount of our product candidates for our clinical trials or, if approved, commercial supply. Even minor deviations from normal manufacturing processes could result in reduced production yields, product defects, and other supply disruptions. Currently, our product candidates are manufactured using processes developed or modified by us, our affiliates or by our third-party collaborators that we may not utilize for more advanced clinical trials or commercialization.

Currently we manufacture our product candidates or we may use third-party CMOs or some of our related parties to manufacture our product candidates. Our clinical trials will need to be conducted with product candidates and materials that were produced under cGMP and/or Good Tissue Practice regulations, which are enforced by regulatory authorities. Our product candidates may compete with other products and product candidates for access to manufacturing facilities. Moreover, because of the complexity and novelty of our manufacturing process, there are only a limited number of manufacturers that operate under cGMP regulations and that are both capable of manufacturing our product candidates for us and willing to do so. If our CMOs should cease manufacturing for us, we would experience delays in obtaining sufficient quantities of our product candidates for clinical trials and, if approved, commercial supply. Further, our CMOs may breach, terminate, or not renew our agreements with them. If we were to need to find alternative manufacturing facilities it may take us significant time to find a replacement, if we are able to find a replacement at all and it would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved. The commercial terms of any new arrangement could be less favorable than our existing arrangements and the expenses relating to the transfer of necessary technology and processes could be significant.

Our failure to comply or our CMOs' failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory review process. We may not be able to demonstrate sufficient comparability between products manufactured at different facilities to allow for inclusion of the clinical results from patients treated with products from these different facilities, in our product registrations. On May 9, 2023, the FDA delivered a complete response letter to us regarding the BLA. The letter indicated that the FDA had determined that it cannot approve the BLA in its present form, and the FDA had made recommendations to address the issues raised. The deficiencies relate to the FDA's pre-license inspection of the company's third-party contract manufacturing organizations. Satisfactory resolution of the observations noted at the pre-license inspection is required before the BLA may be approved. See Part I, Item 2 "*Management's Discussion and Analysis—Subsequent Events.*"

We also are required to register certain 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 could result in enforcement actions and adverse publicity.

Reliance on third-party manufacturers entails exposure to risks to which we would not be subject if we manufactured the product candidate ourselves, including:

- inability to negotiate manufacturing and quality agreements with third parties under commercially reasonable terms;
- reduced day-to-day control over the manufacturing process for our product candidates as a result of using third-party manufacturers for all aspects of manufacturing activities;
- reduced control over the protection of our trade secrets, know-how and other proprietary information from misappropriation or inadvertent disclosure or from being used in such a way as to expose us to potential litigation;
- termination or nonrenewal of manufacturing agreements with third parties in a manner or at a time that may be costly or damaging to us or result in delays in the development or commercialization of our product candidates; and
- disruptions to the operations of our third-party manufacturers or suppliers caused by conditions unrelated to our business or operations, including the bankruptcy of the manufacturer or supplier.

Moreover, any problems or delays we or our CMOs experience in preparing for commercial scale manufacturing of a product candidate may result in a delay in the FDA approval of the product candidate or may impair our ability to manufacture commercial quantities or such quantities at an acceptable cost, which could result in the delay, prevention, or impairment of clinical development and commercialization of our product candidates and could adversely affect our business. Furthermore, if we or our CMOs fail to deliver the required commercial quantities of our product candidates on a timely basis and at reasonable costs, we would likely be unable to meet demand for our products and we would lose potential revenues. We may ultimately be unable to reduce the cost of goods for our product candidates to levels that will allow for an attractive return on investment if and when those product candidates are commercialized.

In addition, the manufacturing process and facilities for any products that we may develop are subject to FDA and foreign regulatory authority approval processes, and we or our CMOs will need to meet all applicable FDA and foreign regulatory authority requirements, including cGMP, on an ongoing basis. The cGMP requirements include quality control, quality assurance and the maintenance of records and documentation. The FDA and other regulatory authorities enforce these requirements through facility inspections. Manufacturing facilities must submit to pre-approval inspections by the FDA that will be conducted after we submit our marketing applications, including BLAs and NDAs, to the FDA. Manufacturers are also subject to continuing FDA and other regulatory authority inspections following marketing approval. Further, we and our third-party CMOs must supply all necessary CMC documentation in support of a BLA or NDA on a timely basis. Our or our CMOs' manufacturing facilities may be unable to comply with our specifications, cGMP, and with other FDA, state, and foreign regulatory requirements, and there is no guarantee that we or our CMOs will be able to successfully pass all aspects of a pre-approval inspection by the FDA or other foreign regulatory authorities. On May 9, 2023, the FDA delivered a complete response letter to us regarding the BLA. The letter indicated that the FDA had determined that it cannot approve the BLA in its present form, and the FDA had made recommendations to address the issues raised. The deficiencies relate to the FDA's pre-license inspection of the company's third-party contract manufacturing organizations. Satisfactory resolution of the observations noted at the pre-license inspection is required before the BLA may be approved. See Part I, Item 2 "*Management's Discussion and Analysis—Subsequent Events.*" We may be unable to resolve the items outlined in the complete response letter in a timely manner, if at all, which could have a material impact on our results of operations, financial condition, and business.

Poor control of production processes can lead to the introduction of adventitious agents or other contaminants, or to inadvertent changes in the properties or stability of product candidates that may not be detectable in final product testing. If microbial, viral, environmental or other contaminants are discovered in our product candidates or in the manufacturing facilities in which our product candidates are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination which could delay clinical trials and adversely harm our business. If we or our CMOs are unable to reliably produce products to specifications acceptable to the FDA or other regulatory authorities, or in accordance with the strict regulatory requirements, we may not obtain or maintain the approvals we need to commercialize such products. Even if we obtain regulatory approval for any of our product candidates, there is no assurance that either we or our CMOs will be able to manufacture the approved product to specifications acceptable to the FDA or other regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of the product, or to meet potential future demand. Deviations from manufacturing requirements may further require remedial measures that may be costly and/or time-consuming for us or a third party to implement and may include the temporary or permanent suspension of a clinical trial 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.

As product candidates progress through preclinical and clinical trials to marketing approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods and formulation, are altered along the way in an effort to optimize yield and manufacturing batch size, minimize costs and achieve consistent quality and results. Such changes carry the risk that they will not achieve these intended objectives. Any of these changes could cause our product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials conducted with the altered materials. This could delay completion of clinical trials, require the conduct of bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidates and jeopardize our ability to commercialize our product candidates, if approved, and generate revenues.

To the extent we use CMOs, we are ultimately responsible for the manufacture of our products, if approved, and product candidates. A failure to comply with these requirements may result in regulatory enforcement actions against our manufacturers or us, including fines and civil and criminal penalties, which could result in imprisonment, suspension or restrictions of production, injunctions, delay or denial of product approval or supplements to approved products, clinical holds or termination of clinical trials, warning or untitled letters, regulatory authority communications warning the public about safety issues with the biologic, refusal to permit the import or export of the products, product seizure, detention, or recall, operating restrictions, suits under the federal civil False Claims Act (FCA), corporate integrity agreements, consent decrees, or withdrawal of product approval.

Any of these challenges could delay completion of clinical trials, require bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidate, impair commercialization efforts, increase our cost of goods, and have a material adverse effect on our business, financial condition, results of operations and growth prospects.

***We may not be successful in managing the build-out of our manufacturing facilities and associated costs or satisfying manufacturing related regulatory requirements.***

We have entered into facility leases for our planned manufacturing operations and related activities under which we are responsible for the build-out of the facility space and associated costs. The build-out of these facilities and related equipment purchases are complex and specialized and will involve substantial capital expenditure, and it could take longer, and cost more, than currently expected. Significant delays and/or cost overruns would result in higher expenditures and could be disruptive of operations, any of which could have a negative impact on our financial condition or results of operations. For example, during the first quarter of 2022 we acquired a leasehold interest in the 409,000 square foot Dunkirk Facility as described below. While we believe that governmental funding will assist in funding a small portion of the further build-out of the Dunkirk Facility, we will need to plan and fund most of the additional build-out of, and purchase additional equipment for, the Dunkirk Facility in connection with our planned full operations. In addition, it is possible that, once built, the leased facilities may prove to be less conducive to our operations than is currently anticipated, resulting in operational inefficiencies or similar difficulties that could prove difficult or impossible to remediate and result in an adverse impact on our financial condition or results of operations. We also may not successfully realize the anticipated benefits from the capital expenditure at such facilities based on factors such as delays and uncertainties regarding development, regulatory approval and commercialization of our product candidates, as well as the potential to lose access to the leased facilities.

Further, in the future if we transition from our current CMOs to our own manufacturing facilities for one or more of our product candidates, including our product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease, for which we submitted a BLA in May 2022, we may need to conduct additional preclinical, analytical or clinical trials and obtain FDA approval before such manufacturing changes are implemented. If we are unsuccessful in demonstrating the comparability of supplies before and after a manufacturing change, such manufacturing change can result in a delay or disruption in our clinical development plan or our ability to commercialize any approved product. Any production shortfall that impairs the supply of our product candidates could negatively impact our ability to complete clinical trials, obtain regulatory approval and commercialize our product candidates. If our product candidates receive approval, a product shortfall could have a material adverse effect on our business, financial condition and results of operations and adversely affect our ability to satisfy demand for our product candidates, which could materially and adversely affect our revenue and results of operations.

In addition, our planned operations, including our development, testing and future manufacturing activities, are subject to numerous environmental, health and safety laws and regulations. These laws and regulations govern, among other things, the controlled use, handling, release and disposal of and the maintenance of a registry for, hazardous materials and biological materials, such as chemical solvents, human cells, carcinogenic compounds, mutagenic compounds and compounds that may have a toxic effect on reproduction, laboratory procedures and exposure to blood-borne pathogens. If we fail to comply with such laws and regulations, we could be subject to fines or other sanctions. Failure to successfully complete our build-outs and successfully operate our planned manufacturing facilities and satisfy manufacturing-related regulatory requirements could adversely affect the commercial viability of our product candidates and our business.

***Cell-based therapies and biologics rely on the availability of reagents, specialized equipment and other specialty materials, which may not be available to us on acceptable terms or at all. For some of these reagents, equipment and materials, we rely or may rely on sole source vendors or a limited number of vendors, which could impair our ability to manufacture and supply our products, if approved.***

We currently depend on a small number of suppliers for some of the materials used in, and processes required to develop, our product candidates. For some of these reagents, equipment and materials used in the manufacture of our product candidates, we rely, and we may in the future rely, on sole source vendors or a limited number of vendors. Some of these suppliers may not have the capacity to support clinical trials and commercial products manufactured under cGMP by biopharmaceutical firms or may otherwise be ill-equipped to support our needs. We also do not have supply contracts with many of these suppliers and may not be able to obtain supply contracts with them on acceptable terms or at all. Accordingly, we may experience delays in receiving key materials and equipment to support clinical or commercial manufacturing. An inability to continue to source product from any of these suppliers could adversely affect our ability to satisfy demand for our product candidates, which could adversely and materially affect our product sales and operating results or our ability to conduct clinical trials, either of which could significantly harm our business.



As we seek to develop and scale our manufacturing process, we expect that we will need to obtain rights to and supplies of certain materials and equipment to be used as part of that process. We may not be able to obtain rights to such materials on commercially reasonable terms, or at all, and if we are unable to alter our process in a commercially viable manner to avoid the use of such materials or find a suitable substitute, it would have a material adverse effect on our business. Even if we are able to alter our process so as to use other materials or equipment, such a change may lead to a delay in our clinical development and/or commercialization plans. If such a change occurs for a product candidate that is already in clinical testing, the change may require us to perform both *ex vivo* comparability studies and to collect additional data from patients prior to undertaking more advanced clinical trials.

***Because our current product candidates represent, and our other potential product candidates will represent, novel approaches to the treatment of disease, there are many uncertainties regarding the development, market acceptance, public opinion, third-party reimbursement coverage and the commercial potential of our product candidates, which may impact public perception of us and our product candidates and which may adversely affect our ability to conduct our business and implement our business plans.***

Human immunotherapy products are a new category of therapeutics. We use relatively novel technologies involving N-803, saRNA, hAd5 and yeast technologies, aldoxorubicin, and cell-based therapies, and our NK cell platform utilizes a relatively novel technology involving the genetic modification of human cells and utilization of those modified cells in other individuals. Because this is a relatively new and expanding area of novel therapeutic interventions, there are many uncertainties related to development, marketing, reimbursement and the commercial potential for our product candidates. There can be no assurance as to the length of the trial period, the number of patients the FDA will require to be enrolled in the trials in order to establish the safety, efficacy, purity and potency of immunotherapy products, or that the data generated in these trials will be acceptable to the FDA to support marketing approval. Adverse public attitudes may adversely impact our ability to enroll patients in clinical trials. The FDA may take longer than usual to come to a decision on any BLA and/or NDA that we submit and may ultimately determine that there is not enough data, information, or experience with our product candidates to support an approval decision. The FDA may also require that we conduct additional post-marketing studies or implement risk management programs, such as REMS, until more experience with our product candidates is obtained. Finally, after increased usage, we may find that our product candidates do not have the intended effect, do not work with other combination therapies or have unanticipated side effects, potentially jeopardizing initial or continuing regulatory approval and commercial prospects. More restrictive government regulations or negative public opinion could have an adverse effect on our business or financial condition and may delay or impair the development and commercialization of our product candidates or demand for any products we may develop. Adverse events in our clinical trials, even if not ultimately attributable to our product candidates, and the resulting publicity could result in increased governmental regulation, unfavorable public perception, potential regulatory delays in the testing or approval of our potential product candidates, stricter labeling requirements for those product candidates that are approved and a decrease in demand for any such product candidates.

There is no assurance that the approaches offered by our product candidates will gain broad acceptance among doctors or patients or that governmental agencies or third-party medical insurers will be willing to provide reimbursement coverage for our proposed product candidates. Public perception may be influenced by claims, such as claims that our technologies are unsafe, unethical or immoral and, consequently, our approach may not gain the acceptance of the public or the medical community. Negative public reaction to cell-based immunotherapy in general could result in greater government regulation and stricter labeling requirements of immunotherapy products, including our product candidates, and could cause a decrease in the demand for any products we may develop. Moreover, our success will depend upon physicians specializing in the treatment of those diseases that our product candidates target prescribing, and their patients being willing to receive treatments that involve the use of our product candidates in lieu of, or in addition to, existing treatments they are already familiar with and for which greater clinical data may be available. The market for any products that we successfully develop will also depend on the cost of the product. We do not yet have sufficient information to reliably estimate what it will cost to commercially manufacture our current product candidates, and the actual cost to manufacture these products could materially and adversely affect the commercial viability of these products. Our goal is to reduce the cost of manufacturing and providing our therapies. However, unless we can reduce those costs to an acceptable amount, we may never be able to develop a commercially viable product. If we do not successfully develop and commercialize products based upon our approach or find suitable and economical sources for materials used in the production of our potential products, we will not become profitable, which would materially and adversely affect the value of our common stock. Our N-803 therapies and our other therapies may be provided to patients in combination with other agents provided by third parties or our affiliates. The cost of such combination therapy may increase the overall cost of therapy and may result in issues regarding the allocation of reimbursements between our therapy and the other agents, all of which may affect our ability to obtain reimbursement coverage for the combination therapy from governmental or private third-party medical insurers.

***If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our product candidates.***

We face an inherent risk of product liability as a result of the clinical development, testing and manufacturing of our product candidates and will face an even greater risk if we commercialize any products. For example, we may be sued if our product candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability or a breach of warranties. Claims could also be asserted under state consumer protection acts. Large judgements have been awarded in class action lawsuits based on therapeutics that had unanticipated side effects. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in a regulatory investigation of the safety and effectiveness of our products, our third-party manufacturer's manufacturing processes and facilities or our marketing programs and potentially a recall of our products or more serious enforcement action, including limitations on the approved indications for which our product candidates may be used or suspension or withdrawal of approvals, decreased demand for our products, injury to our reputation, costs to defend the related litigation, a diversion of management's time and our resources, substantial monetary awards to trial participants or patients and a decline in our stock price.

Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of products we may develop, alone or with corporate collaborators. Our insurance policies may also have various exclusions, and we may be subject to product liability claims for which we have no coverage. While we have obtained clinical trial insurance for our clinical trials, we may have to pay amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

***We will face significant competition from other biotechnology and pharmaceutical companies and from non-profit institutions.***

Competition in the field of cancer and viral infectious disease therapy is intense and is accentuated by the rapid pace of technological development. We compete with a variety of multi-national biopharmaceutical companies and specialized biotechnology companies, as well as technology being developed at universities and other research institutions. These competitors have developed, may develop and are developing product candidates and processes competitive with our product candidates. Research and discoveries by others may result in breakthroughs which may render our product candidates obsolete even before they generate any revenues. We believe that a significant number of products are currently under development, and may become commercially available in the future, for the treatment of conditions for which we are developing product candidates. Many of our competitors have several therapeutic products that have already been developed, approved and successfully commercialized, or are in the process of obtaining regulatory approval for their therapeutic products in the U.S. and internationally. Many of our competitors, either alone or with their strategic partners, have substantially greater financial, technical, and human resources than we do, as well as significantly greater experience in the discovery and development of product candidates, obtaining FDA and other regulatory approvals of treatments and commercializing those treatments. Accordingly, our competitors may be more successful in obtaining approval of treatments and achieving widespread market acceptance, rendering our treatments obsolete or non-competitive, possibly even before we are able to enter the market. Accelerated merger and acquisition activity in the biotechnology and biopharmaceutical industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Even if we obtain regulatory approval for our product candidates, the availability and price of our competitors' products could limit the demand and the price we are able to charge for our therapies. The level of generic competition and the availability of reimbursement from government and other third-party payors will also significantly affect the pricing and competitiveness of our products.

A large number of companies, government agencies and academic centers around the world are developing COVID-19 vaccines, and many of these entities are in more advanced stages of development than we are, including some that have started Phase 2 and/or 3 clinical trials or have already obtained emergency regulatory approval in the U.S. and internationally. Even if one of our COVID-19 vaccine candidates is ultimately approved for marketing, the value of our opportunity will be adversely impacted by other COVID-19 vaccines that have obtained emergency regulatory approval, obtain full regulatory approval, or demonstrate better efficacy or safety than our COVID-19 vaccine candidate.

We may not be able to implement our business plan if the acceptance of our product candidates is inhibited by price competition or the reluctance of physicians to switch from other methods of treatment to our product, or if physicians switch to other new therapies, drugs or biologic products or choose to reserve our product candidates for use in limited circumstances. We may be adversely impacted if any of these competitors gain market share as a result of new technologies, commercialization strategies or otherwise.

***We may seek orphan drug status or Fast Track or Breakthrough Therapy designations or other designation for one or more of our product candidates, but even if any such designation or status is granted, it may not lead to a faster development process or regulatory review and may not increase the likelihood that our product candidates will receive marketing approval, and we may be unable to maintain any benefits associated with such designations or status, including market exclusivity.***

In 2012, the FDA established a *Breakthrough Therapy* designation, which is intended to expedite, although there is no guarantee, the development and review of products that treat serious or life-threatening conditions. We have been awarded, and may seek in the future, *Fast Track* or *Breakthrough Therapy* designation for current or future product candidates. Receipt of a designation to facilitate product candidate development is within the discretion of the FDA. Accordingly, even if we believe one of our product candidates meets the criteria for a designation, the FDA may disagree. In any event, the receipt of such a designation for a product candidate may not result in a faster development process, review or approval compared to product candidates considered for approval under conventional FDA procedures and does not assure ultimate marketing approval by the FDA. In addition, the FDA may later decide that the product candidates no longer meet the designation conditions.

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition or for which there is no reasonable expectation that the cost of developing and making available the drug or biologic will be recovered from sales in the U.S. If a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including a full BLA to market the same drug or biologic for the same indication for seven years, except in limited circumstances. We may seek orphan drug status for one or more of our product candidates, but exclusive marketing rights in the U.S. may be lost if we seek approval for an indication broader than the orphan designated indication and may be lost if the FDA later determines that the request for designation was materially defective or if we are unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

***As a condition of approval, the FDA may require that we implement various post-marketing requirements and conduct post-marketing studies, any of which would require a substantial investment of time, effort, and money, and which may limit our commercial prospects.***

As a condition of biologic licensing, the FDA is authorized to require that sponsors of approved BLAs implement various post-market requirements, including REMS and Phase 4 trials. For example, in connection with FDA approval of another company's drug, the FDA required significant post-marketing commitments, including a Phase 4 trial, revalidation of a test method, and a substantial REMS program that included, among other requirements, the certification of hospitals and their associated clinics that dispensed the drug, including the implementation of a training program and limited distribution only to certified hospitals and their associated clinics. If we receive approval of our product candidates, the FDA may determine that similar or additional or more burdensome post-approval requirements are necessary to ensure that our product candidates are safe, pure and potent. To the extent that we are required to establish and implement any post-approval requirements, we will likely need to invest a significant amount of time, effort and money. Such post-approval requirements may also limit the commercial prospects of our product candidates.

***We have never commercialized a product candidate before, and we may lack the necessary expertise, personnel and resources to successfully commercialize any products on our own or together with suitable collaborators. We may be unable to establish effective marketing and sales capabilities or enter into agreements with third parties or related parties to market and sell our product candidates, if they are approved, and as a result, we may be unable to generate product revenues.***

We have little to no prior experience in, and currently have a limited commercial infrastructure for, the marketing, sale and distribution of biopharmaceutical products. To achieve commercial success for the product candidates, which we may license to others, we will rely on the assistance and guidance of those collaborators. For product candidates for which we retain commercialization rights and marketing approval, if approved, in order to commercialize our product candidates, we must continue to build out our marketing, sales and distribution capabilities, including a comprehensive healthcare compliance program, or arrange with third parties to perform these services, which will take time and require significant financial expenditures and could delay any product launch and we may not be successful in doing so. There are significant risks involved with building and managing a commercial infrastructure. We, or our collaborators, will have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train, manage and retain medical affairs, marketing, sales and commercial support personnel. Recruiting, training and retaining a sales force is expensive and time-consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have incurred these commercialization expenses prematurely or unnecessarily. These efforts may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel. In the event we are unable to develop a commercial infrastructure, we may not be able to commercialize our current or future product candidates, which would limit our ability to generate product revenues. Even if we are able to effectively establish a sales force and develop a marketing and sales infrastructure, our sales force and marketing teams may not be successful in commercializing our current or future product candidates. To the extent we rely on third parties to commercialize any products for which we obtain regulatory approval, we would have less control over their sales efforts and could be held liable if they failed to comply with applicable legal or regulatory requirements.

***If our product candidates do not achieve broad market acceptance, the revenues that we generate from their sales will be limited.***

We have not commercialized a product candidate for any indication. Even if our product candidates are approved by the appropriate regulatory authorities for marketing and sale, they may not gain acceptance among physicians, patients, third-party payors and others in the medical community. If any product candidate for which we obtain regulatory approval does not gain an adequate level of market acceptance, we may not generate significant product revenues or become profitable. Market acceptance of our product candidates by the medical community, patients and third-party payors will depend on a number of factors, some of which are beyond our control. For example, physicians are often reluctant to switch their patients, and patients may be reluctant to switch from, existing therapies even when new and potentially more effective or safer treatments enter the market. Efforts to educate the medical community and third-party payors on the benefits of our product candidates may require significant resources and may not be successful. Even if the medical community accepts that our product candidates are safe and effective for their approved indications, physicians and patients may not immediately be receptive to such product candidates and may be slow to adopt them as an accepted treatment of the approved indications. If any of our product candidates is approved but does not achieve an adequate level of market acceptance, we may not generate significant revenues and we may not become profitable. The degree of market acceptance of any of our product candidates will depend on a number of factors, including:

- the continued safety and efficacy of our product candidates;
- the prevalence and severity of adverse events associated with such product candidates;
- the clinical indications for which the products are approved and the approved claims that we may make for the products;
- limitations or warnings contained in the product's FDA-approved labeling, including potential limitations or warnings for such products that may be more restrictive than other competitive products or distribution and use restrictions imposed by the FDA with respect to such product candidates or to which we agree as part of a mandatory REMS or voluntary risk management plan;
- changes in the standard of care for the targeted indications for such product candidates;
- the relative difficulty of administration of such product candidates;

- our ability to offer such product candidates for sale at competitive prices, including the cost of treatment versus economic and clinical benefit in relation to alternative treatments or therapies;
- the availability of adequate coverage or reimbursement by third parties, such as insurance companies and other healthcare payors, and by government healthcare programs, including Medicare and Medicaid;
- the extent and strength of our marketing and distribution of such product candidates;
- the safety, efficacy and other potential advantages over, and availability of, alternative treatments already used or that may later be approved for any of our intended indications;
- the timing of market introduction of such product candidates, as well as competitive products;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the extent and strength of our third-party manufacturer and supplier support;
- adverse publicity about the product or favorable publicity about competitive products; and
- potential product liability claims.

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

***Our product candidates may face competition sooner than anticipated.***

The enactment of the Biologics Price Competition and Innovation Act of 2009 (BPCIA) created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, the FDA cannot make an approval of an application for a biosimilar product effective until 12 years after the original branded product was approved under a BLA. Certain changes, however, and supplements to an approved BLA, and subsequent applications filed by the same sponsor, manufacturer, licensor, predecessor in interest or other related entity do not qualify for the 12-year exclusivity period.

Our product candidates may qualify for the BPCIA's 12-year period of exclusivity. There is a risk that any product candidates we may develop that are approved as a biological product 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, or that the FDA will not consider any product candidates we may develop to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Additionally, this period of regulatory exclusivity does not block companies pursuing regulatory approval via their own traditional BLA, rather than via the abbreviated pathway. Even if we receive a period of BPCIA exclusivity for our first licensed product, if subsequent products do not include a modification to the structure of the product that impacts safety, purity, or potency, we may not receive additional periods of exclusivity for those products. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of our reference product candidates 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. Medicare Part B encourages use of biosimilars by paying the provider the same percentage of the reference product average sale price as a mark-up, regardless of which product is reimbursed. It is also possible that payors will give reimbursement preference to biosimilars even over reference biologics absent a determination of interchangeability.

For our small molecular product candidates, if qualified, the regulatory exclusivity period is less than for our biologic product candidates. The Federal Food, Drug, and Cosmetic Act (FDCA) provides a five-year period of non-patent marketing exclusivity within the U.S. to the first applicant to gain approval of an NDA for a drug where the FDA has not previously approved any other new drug containing the same active molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated NDA or a 505(b)(2) NDA submitted by another company for a generic version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example, new indications, dosages or strengths of an existing drug. As such, we may face competition from generic versions of our small molecule product candidates, which will negatively impact our long-term business prospects and marketing opportunities.

***We will need to obtain FDA approval of any proposed branded product names, and any failure or delay associated with such approval may adversely affect our business.***

Any name we intend to use for our product candidates in the U.S. will require approval from the FDA regardless of whether we have secured a formal trademark registration from the U.S. Patent and Trademark Office (USPTO). The FDA typically conducts a review of proposed product names, including an evaluation of the potential for confusion with other product names. The FDA may also object to a product name if it believes the name inappropriately implies medical claims or contributes to an overstatement of efficacy. If the FDA objects to any of our proposed product names, we may be required to adopt alternative names for our product candidates. If we adopt alternative names, we would lose the benefit of any existing trademark applications for such product candidate and may be required to expend significant additional resources in an effort to identify a suitable product name that would qualify under applicable trademark laws, not infringe or otherwise violate the existing rights of third parties, and be acceptable to the FDA. We may be unable to build a successful brand identity for a new product name in a timely manner or at all, which would limit our ability to commercialize our product candidates.

***Our internal computer systems, or those used by our CROs, CMOs, clinical sites or other contractors or consultants, may fail or suffer security breaches. A breakdown, cyberattack or information security breach could compromise the confidentiality, integrity and availability of our information technology systems, network-connected control systems and/or our data, interrupt the operation of our business and/or affect our reputation.***

We are and will be dependent upon information technology systems, infrastructure and data. In the ordinary course of our business, we will directly or indirectly collect, store and transmit sensitive data, including intellectual property, confidential information, preclinical and clinical trial data, proprietary business information, personal data and personally identifiable health information of our clinical trial subjects and employees, in our data centers and on our networks, or on those of third parties. The secure processing, maintenance and transmission of this information is critical to our operations. The multitude and complexity of our computer systems and those of our contract research organizations (CROs), CMOs, clinical sites or other contractors or consultants make them inherently vulnerable to service interruption or destruction, malicious intrusion and random attack. Data privacy or security breaches by third parties, employees, contractors or others may pose a risk that sensitive data, including our intellectual property, trade secrets or personal information of our employees, patients, or other business partners may be exposed to unauthorized persons or to the public. Further, as many of our employees are working remotely, our reliance on our and third-party information technology systems has increased substantially and is expected to continue to increase.

Despite the implementation of security measures, our internal computer systems and those of our CROs, CMOs, clinical sites and other contractors and consultants are vulnerable to failure or damage from computer viruses and other malware, employee error, unauthorized and authorized access or other cybersecurity attacks, natural disasters, terrorism, war, fire and telecommunication and electrical failures. As the cyberthreat landscape evolves, these cyberattacks are increasing in their frequency, sophistication and intensity and are becoming increasingly difficult to detect. The techniques used by cybercriminals change frequently, may not be recognized until launched and can originate from a wide variety of sources, including outside groups such as external service providers, organized crime affiliates, terrorist organizations or hostile foreign governments or agencies. Cyberattacks could include the deployment of harmful malware, denial-of-service, social engineering and other means to affect service reliability and threaten data confidentiality, integrity and availability. While we and our shared services partner, NantWorks, have invested, and continue to invest, in the protection of our data and information technology infrastructure, there can be no assurance that our efforts, or the efforts of our partners, vendors, CROs, CMOs, clinical sites and other contractors and consultants will prevent service interruptions, or identify breaches in our or their systems, that could adversely affect our business and operations and/or result in the loss of critical or sensitive information, which could result in financial, legal, business or reputational harm to us. In addition, our liability insurance may not be sufficient in type or amount to cover us against claims related to security breaches, cyberattacks and other related breaches.

If any such event were to occur and cause interruptions in our operations, it could result in a disruption of our product development programs. For example, the loss of clinical trial data from completed or ongoing clinical trials for a product candidate could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data, or may limit our ability to effectively execute a product recall, if required. To the extent that any disruption or security breach were to result in a loss of or damage to our data or applications, or inappropriate disclosure of personal, confidential or proprietary information, we could incur liability and the further development and commercialization of any product candidates could be delayed. Any such event could also result in legal claims or proceedings, liability under laws that protect the privacy of personal information and significant regulatory penalties, and damage to our reputation and a loss of confidence in us and our ability to conduct clinical trials.

***Our business could be adversely affected by the effects of health epidemics, pandemics or contagious diseases, including the recent COVID-19 pandemic and the public and governmental effort to mitigate against the spread of the disease, in regions where we or third parties on which we rely have significant manufacturing facilities, concentrations of clinical trial sites or other business operations, and may have a material adverse effect, on our clinical trials, operations, supply chains, distribution systems, product development, business and results of operations.***

Outbreaks of epidemic, pandemic or contagious diseases, such as the ongoing COVID-19 pandemic, and measures taken in response by governments and businesses worldwide to contain its spread have adversely impacted and may continue to significantly disrupt our operations and adversely affect our business, financial condition and results of operations. Many countries including the U.S. implemented measures such as quarantine, shelter-in-place, curfew, travel and activity restrictions and similar isolation measures, including government orders and other restrictions on the conduct of business operations. The continued spread of this pandemic has caused significant volatility and uncertainty in the U.S. and international markets and has resulted in increased risks to our operations. The COVID-19 pandemic and any actions we have taken in response, are affecting and could materially affect our operations, including at our headquarters and at our manufacturing facilities, which have been and may in the future be subject to state executive orders and shelter-in-place orders, and at our clinical trial sites, as well as the business or operations of our CROs, CMOs, clinical sites or other third parties with whom we conduct business. Any such epidemic or pandemic may heighten the risk that a significant portion of our workforce could suffer illness or otherwise not be permitted or be unable to work, and may require that certain of our employees work remotely, which heightens certain risks, including but not limited to, those associated with an increased demand for information technology resources, increased risk of cybersecurity attacks (including social engineering attacks), risks related to internal controls and increased risk of unauthorized dissemination of sensitive personal information or our proprietary or confidential information.

The rapid development and fluidity of the pandemic preclude any prediction as to the ultimate effect of COVID-19 on us. While the U.S. and other countries have reopened their economies to varying degrees, the extent to which COVID-19 will impact our future operations will depend on many factors which cannot be predicted with confidence, including the duration of the outbreak. Any resurgence in COVID-19 infections could result in the imposition of new mandates and prolonged restrictive measures implemented in order to control the spread of the disease.

U.S. President Biden has issued an Executive Order requiring federal employees and covered contractors to be vaccinated against COVID-19. Additionally, on November 4, 2021, the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) issued a COVID-19 Vaccination and Testing Emergency Temporary Standard requiring all employers with 100 or more employees to ensure that their employees are fully vaccinated or tested for COVID-19 on at least a weekly basis. On January 20, 2022, The U.S. Supreme Court invalidated this requirement. However additional vaccine and testing mandates may be announced in other jurisdictions in which we operate our business. While it is not currently possible to predict with any certainty the exact impact the new regulations would have on us and our suppliers, the implementation of such government mandated vaccination or testing mandates may impact our ability to retain current employees and attract new employees and result in labor disruptions.

We are monitoring a number of risks related to this pandemic, including the following:

- **Financial:** We expect to continue spending on research and development during the year ending December 31, 2023 and beyond, and we could also have unexpected expenses related to the pandemic. The short-term continued expenses, as well as the overall uncertainty and disruption caused by the pandemic, will likely cause a delay in our ability to commercialize a product and adversely impact our financial results.
- **Manufacturing:** The pandemic has impacted, and may continue to impact, our manufacturing locations, including through the effects of facility closures, reductions in operating hours and other social distancing efforts.
- **Supply Chain:** As the pandemic continues to progress, it has resulted and could continue to result in significant disruptions in our respective supply chains and distribution channels in the future. In addition, there may be unfavorable changes in the availability or cost of raw materials, intermediates and other materials necessary for production, which may result in disruptions in our supply chain and adversely affect our ability to have manufactured certain product candidates for clinical supply.
- **Clinical Trials:** This pandemic may adversely affect certain of our clinical trials, including our ability to initiate and complete our clinical trials within the anticipated timelines. Due to site and participant availability during the pandemic, new subject enrollment has slowed and is expected to continue to slow, at least in the short-term, for most of our clinical trials. For ongoing trials, we have seen, and expect to continue to see an increasing number of clinical trial sites imposing restrictions on patient visits to limit risks of possible COVID-19 exposure, and we may experience issues with participant compliance with clinical trial protocols as a result of quarantines, travel restrictions and interruptions to healthcare services. The current pressures on medical systems and the prioritization of healthcare resources toward the COVID-19 pandemic have also resulted, and may continue to result, in interruptions in data collection and submissions for certain clinical trials and delayed starts for certain planned studies. As a result, our anticipated filing and marketing timelines may be adversely impacted.
- **Overall Economic and Capital Markets Environment:** The continued spread of COVID-19 has led to and could continue to lead to severe disruption and volatility in the U.S. and global capital markets, which could result in a decline in stock price, high inflation, increase our cost of capital and adversely affect our ability to access the capital markets in the future even after local conditions improve. In addition, trading prices on the public stock market have been highly volatile as a result of the COVID-19 pandemic.
- **Regulatory Reviews:** The operations of the FDA or other regulatory agencies may be adversely affected. The legislative and regulatory environment governing our businesses is dynamic and changing frequently in response to COVID-19. In response to COVID-19, federal, state and local governments are issuing new rules, regulations, orders and advisories on a regular basis. These government actions can impact us, our members and our suppliers. There is also the possibility that we may experience delays with obtaining approvals for our IND applications, BLAs, and/or NDAs. The pandemic may also result in greater regulatory uncertainty.



## Risks Related to Reliance on Third Parties

***We have limited experience conducting clinical trials and have relied and will rely on third parties and related parties to conduct many of our preclinical studies and clinical trials, to manufacture products and to perform many essential services for any products that we commercialize, including services related to distribution, government price reporting, customer service, accounts receivable management, cash collection and adverse event reporting. Any failure by a third party, related party, or by us to perform as expected, to comply with legal and regulatory requirements or to conduct the clinical trials according to GCP regulations, and in a timely manner, may delay or prevent our ability to seek or obtain regulatory approval for or commercialization of our product candidates and our ability to commercialize our current or future product candidates will be significantly impacted and we may be subject to regulatory sanctions.***

Large-scale clinical trials require significant financial and management resources. We expect to be heavily reliant on third and related parties, including medical institutions, academic institutions, clinical investigators or CROs to conduct, supervise or monitor some or all aspects of our clinical trials, and in some cases, CMOs to manufacture products, which may force us to encounter delays and challenges that are outside of our control. Nevertheless, we are responsible for ensuring that each of our trials is conducted in accordance with the applicable trial protocol and legal, regulatory and scientific standards, and our reliance on CROs, clinical trial sites, and other third parties does not relieve us of these responsibilities. Our CROs and other third parties must communicate and coordinate with one another in order for our trials to be successful. We have a limited history of conducting clinical trials and have no experience as a company in filing and supporting the applications necessary to gain marketing approvals. Our relative lack of experience conducting clinical trials may contribute to our planned clinical trials not beginning or completing on time, if at all. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities and clinical trial sites by, applicable regulatory authorities.

For example, we will remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial and for ensuring that our preclinical studies are conducted in accordance with Good Laboratory Practice (GLP) regulations, as appropriate. Moreover, the FDA and comparable foreign regulatory authorities require us and the third parties upon which we intend to rely for conducting our clinical trials to comply with GCP for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity, and confidentiality of trial participants are protected. Regulatory authorities enforce these requirements through periodic inspections (including pre-approval inspections once a BLA or NDA is filed with the FDA) of trial sponsors, clinical investigators, trial sites and certain third parties including CMOs. If we, our CROs, clinical trial sites, or other third parties fail to comply with applicable GCP or other regulatory requirements, we or they may be subject to enforcement or other legal actions, the clinical data generated in our clinical trials may be deemed unreliable and have to be repeated, and our submission of marketing applications may be delayed or the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP regulations.

We rely on third parties to manufacture, package, label and ship some of our product candidates for the clinical trials that we conduct. Any performance failure on the part of these third parties could delay clinical development or marketing approval of our product candidates or commercialization of our product candidates, if approved, producing additional losses and depriving us of potential product revenues.

Our CROs, clinical trial sites and other third parties may also have relationships with other entities, some of which may be our competitors, for whom they may also be conducting clinical trials or other therapeutic development activities that could harm our competitive position. In addition, these third parties are not our employees, and except for remedies available to us under our agreements with them, we cannot control whether or not they devote sufficient time and resources to our ongoing clinical and preclinical programs. If these third parties conducting our clinical trials (i) do not successfully carry out their contractual duties, (ii) do not meet expected deadlines, (iii) experience work stoppages, (iv) do not conduct our clinical trials in accordance with regulatory requirements or our stated protocols, (v) need to be replaced, (vi) experience financial hardships or (vii) terminate their agreements with us or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our clinical trial protocols, GCP or other regulatory requirements or for other reasons, our trials may need to be repeated, extended, delayed or terminated, we may not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates, we will not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates or we or they may be subject to regulatory enforcement actions. Additionally, we may need to conduct additional clinical trials or enter into new arrangements with alternative CROs, clinical investigators or other third parties, which we may not be able to do on commercially reasonable terms, or at all and which may involve additional cost and time and require management time and focus. As a result, delays could occur, which could compromise our ability to meet our desired development timelines. Furthermore, if any of the third parties conducting our clinical trials experience any financial hardships due to difficulties relating to the operation of their business, it could damage our business, financial condition, results of operations and prospects. In addition, if an agreement with any of our collaborators terminates, our access to technology and intellectual property licensed to us by that collaborator may be restricted or terminate entirely, which may delay the continued development of our product candidates using the collaborator's technology or intellectual property or require us to stop development of those product candidates completely. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenues could be delayed. To the extent we are unable to successfully identify and manage the performance of third-party service providers in the future, our business may be materially and adversely affected.

We expect to retain third-party service providers to perform a variety of functions related to the sale of our current or future product candidates, key aspects of which will be out of our direct control. These service providers may provide key services related to distribution, customer service, accounts receivable management, and cash collection. If we retain a service provider, we would substantially rely on it as well as other third-party providers that perform services for us, including entrusting our inventories of products to their care and handling. If these third-party service providers fail to comply with applicable laws and regulations, fail to meet expected deadlines or otherwise do not carry out their contractual duties to us, or encounter physical or natural damage at their facilities, our ability to deliver product to meet commercial demand would be significantly impaired and we may be subject to regulatory enforcement action.

In addition, we may engage in the future with third parties to perform various other services for us relating to adverse event reporting, safety database management, fulfillment of requests for medical information regarding our product candidates and related services. If the quality or accuracy of the data maintained by these service providers is insufficient, or these third parties otherwise fail to comply with regulatory requirements related to adverse event reporting, we could be subject to regulatory sanctions.

Additionally, we may contract in the future with a third party to calculate and report pricing information mandated by various government programs. If a third party fails to timely report or adjust prices as required or errs in calculating government pricing information from transactional data in our financial records, it could impact our discount and rebate liability, and potentially subject us to regulatory sanctions or FCA lawsuits.

Our reliance on third and related parties can also present intellectual property-related risks. For example, collaborators may not properly obtain, maintain, enforce or defend intellectual property or proprietary rights relating to our product candidates or technology or may use our proprietary information in such a way as to expose us to potential litigation or other intellectual property-related proceedings, including proceedings challenging the scope, ownership, validity and enforceability of our intellectual property. Collaborators may also own or co-own intellectual property covering our product candidates or technology that results from our collaboration with them, and in such cases, we may not have the exclusive right to commercialize such intellectual property or such product candidates or technology. Collaborators may also gain access to our trade secrets or formulations and impact our ability to commercialize proprietary technology. We may also need the cooperation of our collaborators to enforce or defend any intellectual property we contribute to or that arises out of our collaborations, which may not be provided to us.

We also anticipate that part of our strategy for pursuing the wide range of indications potentially addressed by N-803 will involve further investigator-led clinical trials. While these trials generally provide us with valuable clinical data that can inform our future development strategy, we generally have less control over not only the conduct but also the design of these clinical trials. Third-party investigators may design clinical trials involving our product candidates with clinical endpoints that are more difficult to achieve or in other ways that increase the risk of negative clinical trial results compared to clinical trials we may design on our own. Negative results from investigator-led clinical trials, regardless of how the clinical trial was designed or conducted, could have a material adverse effect on our business and the perception of our product candidates.

Moreover, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and receive compensation in connection with such services.

***If third-party manufacturers, wholesalers and distributors fail to perform as expected, or fail to devote sufficient time and resources to our product candidates, our clinical development may be delayed, our costs may be higher than expected or our product candidates may fail to be approved, or we may fail to commercialize any product candidates if approved.***

Our reliance on third-party manufacturers, wholesalers and distributors exposes us to the following risks, any of which could delay FDA approval of our product candidates and commercialization of our product candidates if approved, result in higher costs, or deprive us of potential product revenues:

- our CMOs, or other third parties we rely on, may encounter difficulties in achieving the volume of production needed to satisfy commercial demand, may experience technical issues that impact quality or compliance with applicable and strictly enforced regulations governing the manufacture of pharmaceutical products, and may experience shortages of qualified personnel to adequately staff production operations;
- our wholesalers and distributors could become unable to sell and deliver our product candidates for regulatory, compliance and other reasons;
- our CMOs, wholesalers and distributors could breach or default on their agreements with us to meet our requirements for commercialization of our product candidates;
- our CMOs, wholesalers and distributors may not perform as agreed or may not remain in business for the time required to successfully produce, store, sell and distribute our product candidates and we may incur additional cost;
- our CMOs, wholesalers and distributors may misappropriate our proprietary information; and
- if our CMOs, wholesalers and distributors were to terminate our arrangements or fail to meet their contractual obligations, we may be forced to delay our commercial programs.

Our reliance on third parties reduces our control over our product candidate development activities but does not relieve us of our responsibility to ensure compliance with all required legal, regulatory and industry standards. For example, the FDA and other regulatory authorities require that our product candidates and any products that we may eventually commercialize be manufactured according to cGMP requirements. Any failure by our third-party manufacturers to comply with cGMP or maintain a compliance status acceptable to the FDA or other regulatory authorities or failure to scale up manufacturing processes, including any failure to deliver sufficient quantities of product candidates in a timely manner, could lead to a delay in, or failure to obtain, regulatory approval of any of our product candidates. On May 9, 2023, the FDA delivered a complete response letter to us regarding the BLA. The letter indicated that the FDA had determined that it cannot approve the BLA in its present form, and the FDA made recommendations to address the issues raised. The deficiencies relate to the FDA's pre-license inspection of the company's third-party contract manufacturing organizations. Satisfactory resolution of the observations noted at the pre-license inspection is required before the BLA may be approved. See Part I, Item 2 "[Management's Discussion and Analysis—Subsequent Events](#)." In addition, our third-party manufacturers will be subject to periodic inspections by the FDA and other regulatory authorities, and failure to comply with cGMP could be the basis for the FDA to issue a warning or untitled letter, withdraw approvals for product candidates previously granted to us, or take other regulatory or legal action, including a request to recall or seize product candidates, total or partial suspension of production, suspension of clinical trials, refusal to approve pending applications or supplemental applications, detention of product, refusal to permit the import or export of product candidates, injunction, imposing civil penalties or pursuing criminal prosecution.

Additionally, as we scale up manufacturing of our product candidates and conduct required stability testing, we may encounter additional challenges or cGMP issues. These issues may require refinement or resolution in order to proceed with commercial marketing of our product candidates if approved. In addition, quality issues may arise during scale-up and validation of commercial manufacturing processes. Any issues in our manufacturing process could result in increased scrutiny by regulatory authorities, delays in our regulatory review process, increases in our operating expenses, or failure to obtain or maintain approval for our product candidates. If such issues relate to an approved product, we may not be able to commercialize the approved product as we planned or fail to meet commercial demand, any of which can materially and adversely affect our position in the market.

***We use the Clinic, a related party, in some of our clinical trials which may expose us to significant regulatory risks. If our data for this site is not sufficiently robust or if there are any data integrity issues, we may be required to repeat such studies or required to contract with other clinical trial sites, and our clinical development plans will be significantly delayed, and we will incur additional costs.***

The Clinic has conducted, is currently conducting, and in the future may conduct, clinical trials involving our product candidates. The Clinic is a related party as it is owned by an officer of the company and additionally, NantWorks manages the administrative operations of the Clinic. Prior to June 30, 2019, one of the company's officers was an investigator or sub-investigator for certain of the company's trials conducted at the Clinic. NantWorks, which is wholly owned by our Executive Chairman and Global Chief Scientific and Medical Officer, Dr. Soon-Shiong, provides certain administrative services (and has loaned money) to the Clinic. Under certain circumstances, we may be required to report some of these relationships to the FDA. Relying on a related party clinical site to develop data that is used as the basis to support regulatory approval can expose us to significant regulatory risks. The FDA may conclude that a financial relationship between us, the Clinic and/or a principal investigator has created a conflict of interest or otherwise affected interpretation of the study. The FDA or comparable regulatory authorities may therefore question the integrity of the data generated at the applicable clinical trial site and the utility of the clinical trial itself may be jeopardized. If any data integrity, or regulatory non-compliance issues occur during the study, we may not be able to use the data for our regulatory approval. This could result in a delay in approval, or rejection, of our marketing applications by the FDA and may ultimately lead to the denial of regulatory approval of one or more of our product candidates.

***We have formed, and may in the future form or seek, strategic alliances or enter into collaborations with third parties or additional licensing arrangements in the future, and we may not realize the benefits of such alliances or licensing arrangements. If we fail to enter into such strategic alliances, collaborations or licensing arrangements, or such strategic alliances, collaborations or licensing arrangements are not successful, we may not be able to capitalize on the market potential of our product candidates.***

We have formed, and may in the future form or seek, strategic alliances, create joint ventures or collaborations or enter into additional licensing arrangements with third and related parties that we believe will complement or augment our development and commercialization efforts with respect to our product candidates and any future product candidates that we may develop. We plan to collaborate with governmental, academic and corporate partners, including affiliates, to improve and develop N-803, saRNA, hAd5 and yeast technologies, and other therapies for new indications for use in combination with other therapies and to improve and develop other product candidates, which may expose us to additional risks, or we may not realize the benefits of such collaborations.

Because some of our collaborations are conducted at outside laboratories, and we do not have complete control over how the studies are conducted or reported or over the manufacturing methods used to manufacture our product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease, the results of such studies, which we may use as the basis for our conclusions, projections or decisions with respect to our current or future product candidates, may be incorrect or unreliable, or may have a negative impact on us if the results of such studies are imputed to our product candidates or proposed indications, even if such imputation is improper. Additionally, we may use third-party data to analyze, reach conclusions or make predictions or decisions with respect to our product candidates that may be incomplete, inaccurate or otherwise unreliable.

Further, collaborations involving our product candidates will be subject to numerous risks, which may include the following:

- collaborators, including their related or affiliated companies, may be entitled to receive exclusive rights for or involving our products;
- collaborators have significant discretion in determining the efforts and resources that they will apply to a collaboration;
- collaborators may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization of our product candidates based on clinical trial results, changes in their strategic focus due to the acquisition of competitive products, availability of funding or other external factors, such as a business combination that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial, stop a clinical trial, abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our product candidates;
- a collaborator with marketing and distribution rights to one or more products may not commit sufficient resources to their marketing and distribution;
- collaborators may not properly maintain, defend or enforce our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that cause the delay or termination of the research, development or commercialization of our product candidates, or that result in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates;
- if an agreement with any collaborator terminates, our access to technology and intellectual property licensed to us by that collaborator may be restricted or terminate entirely, which may delay our continued development of our product candidates using the collaborator's technology or intellectual property or require us to stop development of those product candidates completely; and
- collaborators may own or co-own intellectual property covering our product candidates or technology that results from our collaborating with them, and in such cases, we may not have the exclusive right to commercialize such intellectual property.

As a result, if we enter into collaboration agreements and strategic partnerships or license our product candidates, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture, which could delay our timelines or otherwise adversely affect our business. Additionally, exclusive rights that we may grant in connection with collaboration agreements may limit our ability to enter into new or additional collaboration agreements or strategic partnerships if we experience issues with existing collaborations. We also cannot be certain that, following a strategic transaction or license, we will achieve the revenues or specific net income that justifies such transaction. Any delays in entering into new collaborations or strategic partnership agreements related to our product candidates could delay the development and commercialization of our product candidates in certain geographies for certain indications, which would harm our business prospects, financial condition and results of operations.

Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing stockholders or disrupt our management and business. In addition, we face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for our product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our product candidates as having the requisite potential to demonstrate safety and efficacy.

***If conflicts arise between us and our collaborators or strategic partners, these parties may act in a manner adverse to us and could limit our ability to implement our strategies.***

If conflicts arise between our corporate or academic collaborators or strategic partners and us, the other party may act in a manner adverse to us and could limit our ability to implement our strategies. Some of our existing academic collaborators and strategic partners are conducting multiple product development efforts. Such current or future collaborators or strategic partners could become our competitors in the future and could develop competing products, preclude us from entering into collaborations with their competitors, fail to obtain timely regulatory approvals, terminate their agreements with us prematurely or fail to devote sufficient resources to the development and commercialization of our product candidates. Competing product candidates, either developed by the collaborators or strategic partners or to which the collaborators or strategic partners have rights, may result in the withdrawal of our collaborator's or partner's support for our product candidates.

For example, in 2019, Sorrento Therapeutics, Inc. with which we jointly established a new entity called Immunotherapy NANTibody, LLC as a stand-alone biotechnology company, commenced litigation against us and certain of our officers and directors, alleging that we improperly caused NANTibody to acquire IgDraSol. Additionally, in 2020, we received a Request for Arbitration before the International Chamber of Commerce, International Court of Arbitration, served by Shenzhen Beike Biotechnology Co. Ltd. asserting breach of contract under our subsidiary Altor's license agreement with them. For more information regarding these disputes, see [Note 7, Commitments and Contingencies—Litigation](#), of the "Notes to Condensed Consolidated Financial Statements" that appears in Part I, Item 1. "Financial Statements" of this Quarterly Report on Form 10-Q. Any of these developments could harm our product development efforts.

***Our use of joint ventures, strategic partnerships and alliances may expose us to risks associated with jointly owned investments.***

We may operate parts of our business through joint ventures, strategic partnerships and/or alliances with other companies. While such arrangements may, in some cases, give us access to technologies that we may not otherwise have or may give us access to capital, they involve risks not otherwise present in our own investments, including: (i) we may not control the venture, and it may divert management time and resources; (ii) the partner(s) may not agree to distributions that we believe are appropriate; (iii) we may experience impasses or disputes with such partner(s) on certain decisions, which could require us to expend additional resources to resolve such impasses or disputes, including litigation or arbitration; (iv) our partner(s) may become insolvent or bankrupt, fail to fund their share of required capital contributions or fail to fulfil their obligations as a venture partner; (v) the arrangements governing these relationships may contain certain conditions or milestone events that may never be satisfied or achieved; (vi) our partner(s) may have business or economic interests that are inconsistent with our interests and may take actions contrary to our interests; (vii) we may suffer losses as a result of actions taken by the partner(s); and (viii) it may be difficult for us to exit if an impasse arises or if we desire to sell our interest for any reason. For example, we have established a joint venture relationship with Amyris, and there can be no guarantee that it will be successful. In addition, we may, in certain circumstances, be liable for the actions of our partners. Any of the foregoing risks could have a material adverse effect on our business, financial condition and results of operations.

***We are heavily dependent on our senior management, particularly Dr. Soon-Shiong, our Executive Chairman and Global Chief Scientific and Medical Officer, and a loss of a member of our senior management team in the future, even if only temporary, could harm our business.***

Our operations will be dependent upon the services of our executives and our employees who are engaged in research and development. If we lose the services of members of our senior management, particularly Dr. Soon-Shiong, for a short or an extended time, for any reason, we may not be able to find appropriate replacements on a timely basis, and our business, financial condition and results of operations could be materially adversely affected. Our existing operations and our future development depend to a significant extent upon the performance and active participation of certain key individuals, particularly Dr. Soon-Shiong, our Executive Chairman and Global Chief Scientific and Medical Officer. Although Dr. Soon-Shiong focuses heavily on our matters and is highly active in our management, he does devote a significant amount of his time to a number of different endeavors and companies, including NantHealth, Inc., NantMedia Holdings, LLC (which operates the Los Angeles Times and the San Diego Union-Tribune) and NantWorks, which is a collection of multiple companies in the healthcare and technology space. The risks related to our dependence upon Dr. Soon-Shiong are particularly acute given his ownership percentage, the commercial and other relationships that we have with entities affiliated with him, his role in our company and his public reputation. We may also be dependent on additional funding from Dr. Soon-Shiong and his affiliates, which may not be available when needed and which he is under no obligation to provide.

To induce valuable employees to remain at our company, in addition to salary and cash incentives, we have provided, and plan to continue providing, equity incentive awards that vest over time. The value to employees of equity incentive awards that vest over time may be significantly affected by movements in our stock price that are beyond our control and may at any time be insufficient to counteract more lucrative offers from other companies. Despite our efforts to retain valuable employees, members of our management, scientific and development teams may terminate their employment with us on short notice. We do not have employment agreements with our NEOs and do not maintain “key man” insurance policies on the lives of these individuals or the lives of any of our other employees.

***We will need to grow the size and capabilities of our organization, and we may experience difficulties in managing this growth.***

Our future financial performance and our ability to commercialize our product candidates will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert a disproportionate amount of their attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities. In order to develop our business in accordance with our business plan, we will have to hire additional qualified personnel, including in the areas of research, manufacturing, clinical trials management, regulatory affairs, and sales and marketing. We are continuing our efforts to recruit and hire the necessary employees to support our planned operations in the near term. However, competition for qualified personnel in the biotechnology and pharmaceuticals industry is intense due to the limited number of individuals who possess the skills and experience required, and no assurance can be given that we will be able to attract, hire, retain and motivate the highly skilled employees that we need, on acceptable terms or at all. Future growth will impose significant added responsibilities on members of management, including:

- identifying, recruiting, integrating, maintaining, and motivating additional employees;
- managing our internal development efforts effectively, including the clinical and FDA review process for our product candidates, while complying with our contractual obligations to contractors and other third parties; and
- improving our operational, financial and management controls, reporting systems, and procedures.

We currently rely, and for the foreseeable future we expect to rely, in substantial part on certain independent organizations, advisors and consultants to provide certain services. There can be no assurance that the services of these independent organizations, advisors and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements on economically reasonable terms, or at all. In addition, if we are unable to effectively manage our outsourced activities or if the quality, compliance or accuracy of the services provided by consultants is compromised for any reason, our clinical trials may be extended, delayed, or terminated, and we may not be able to obtain regulatory approval of our product candidates or otherwise advance our business.

If we are not able to effectively expand our organization by hiring new employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop and commercialize our product candidates and, accordingly, may not achieve our research, development, and commercialization goals on a timely basis, or at all.

***If we engage in future acquisitions or strategic partnerships, this may increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities, and subject us to other risks.***

We may evaluate various acquisitions and strategic partnerships, including licensing or acquiring complementary products, intellectual property rights, technologies, or businesses. Any potential acquisition or strategic partnership may entail numerous risks, including:

- assimilation of operations, intellectual property, and products of an acquired company or product, including difficulties associated with integrating new personnel;
- the diversion of our managements' attention from our existing product programs and initiatives in pursuing such a strategic merger or acquisition;
- retention of key employees, the loss of key personnel, and uncertainties in our ability to maintain key business relationships;
- significant upfront milestone and/or royalty payments from which we may not realize the anticipated benefits;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing products or product candidates and regulatory approvals; and
- our inability to generate revenues from acquired technology and/or products sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs.

Depending on the size and nature of future strategic acquisitions, we may acquire assets or businesses that require us to raise additional capital or to operate or manage businesses in which we have limited experience. Making larger acquisitions that require us to raise additional capital to fund the acquisition will expose us to the risks associated with capital raising activities. Acquiring and thereafter operating larger new businesses will also increase our management, operating and reporting costs and burdens (including increased cash requirements). In addition, if we undertake acquisitions, we may issue dilutive equity securities, assume or incur additional debt obligations or contingent liabilities, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense. Moreover, we may not be able to locate suitable acquisition opportunities and this inability could impair our ability to grow or obtain access to technology or products that may be important to the development of our business.

***A variety of risks associated with marketing our product candidates internationally could materially adversely affect our business.***

We plan to seek regulatory approval of our product candidates outside of the U.S. and, accordingly, we expect that we will be subject to additional risks related to operating in foreign countries if we obtain the necessary approvals, including:

- differing regulatory requirements in foreign countries;
- unexpected changes in tariffs, trade barriers, price and exchange controls and other regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;



- foreign currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country;
- difficulties staffing and managing foreign operations;
- workforce uncertainty in countries where labor unrest is more common than in the U.S.;
- differing payor reimbursement regimes, governmental payors or patient self-pay systems, and price controls;
- potential liability under the FCPA or comparable foreign regulations;
- challenges enforcing our contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the U.S.;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad;
- the impact of public health epidemics on the global economy, such as the coronavirus pandemic currently having an impact throughout the world; and
- business interruptions resulting from geopolitical actions, including war and terrorism.

These and other risks associated with international operations may materially adversely affect our ability to attain or maintain profitable operations.

***We are party to a public-private partnership regarding our manufacturing facility in Dunkirk, New York, and if we or our counterparties fail to meet the obligations of those agreements, it could materially impact our development, operations and prospects.***

On February 14, 2022, we acquired a leasehold interest in the Dunkirk Facility from Athenex. The facility is expected to be a state-of-the-art biotech production center that we believe will substantially expand and diversify our existing manufacturing capacity in the U.S.

We paid approximately \$40.0 million to Athenex, and the leasehold interest in the Dunkirk Facility was transferred to us. Our annual lease payment will be \$2.00 per year for an initial 10-year term, with an option to renew the lease under substantially the same terms and conditions for an additional 10-year term. As part of the transaction, we assumed obligations under various third-party agreements, and committed to spend \$1.52 billion on operational expenses during the initial term, and an additional \$1.50 billion on operational expenses if we elect to renew the lease for the additional 10-year term. We also committed to hiring 450 employees at the Dunkirk Facility within the first five years of operations, with 300 such employees to be hired within the first 2.5 years of operation. We are eligible for certain sales-tax exemption savings during the development of the Dunkirk Facility, and certain property tax savings over the next 20 years, subject to certain terms and conditions, including performance of certain of the obligations described above.

In addition, we believe that the Dunkirk Facility has construction needs that may require approximately 12 to 18 months to complete in order for it to be used as intended. Consequently, during the third quarter of 2022, we determined to conduct a reduction-in-force of a significant portion of the then-current employees at the Dunkirk Facility, which became effective in late December 2022. The construction period and reduction-in-force may adversely affect our ability to satisfy certain operational obligations described above. In addition, while we believe we are in compliance with all applicable laws and agreements implicated by the reduction-in-force, we could become subject to litigation in connection with these measures.

Failure to satisfy the obligations over the lease term, including the milestones we have committed to achieve, may give rise to certain rights and remedies of the lessor and other governmental authorities including, for example, termination of the lease agreement and other related agreements and potential recoupment of a percentage of the grant funding received by the Seller for construction of the Dunkirk Facility and other benefits received, subject to the terms and conditions of the applicable agreements. If we lose access to the Dunkirk Facility and related leased equipment, it could disrupt our operations and manufacturing activities, cause us to divert resources to finding alternative facilities, which would not have any subsidies, and could have a significant impact on our operations and financial performance. We may also be subject to lawsuits or claims for damages against us if we are unable to comply with our obligations under these arrangements or in connection with other aspects of the Dunkirk Facility, which could materially and adversely affect our business, results of operations and financial condition. For example, we were named as a defendant in a lawsuit filed during the fourth quarter of 2022 by Exyte U.S., Inc. (Exyte) in New York state court arising from a construction agreement Exyte entered with Athenex pertaining to construction of the Dunkirk Facility. We believe we are entitled to defense costs and indemnification and, accordingly, we have provided notice to Athenex. In April 2023, Athenex announced that it had appointed a Chief Restructuring Officer to support Athenex's ongoing review of strategic alternatives. We further believe Exyte's claims against us are without merit, and we intend to defend the claims vigorously. Furthermore, there is no guarantee that the counterparties to our public-private partnerships will comply with the terms of the agreements, including that their ability to fund their capital commitments under the agreements may be subject to their ability to raise additional capital and that further construction or operational timetables may not be met. Public-private partnerships are also subject to risks associated with government and government agency counterparties, including risks related to government relations compliance, sovereign immunity, shifts in the political environment, changing economic and legal conditions and social dynamics.

***Our contractors and subcontractors may place liens on our projects, and if they then successfully foreclose on such projects, we may not be able to use such assets for our business.***

Under general property law, any contractor or subcontractor doing work on a project may attach a lien on the property with respect to which it does work to secure the dollar value of all labor and material furnished to the project. A valid lien holder could, after the lien is perfected, institute a collection suit, according to the lien, and if it were successful in obtaining a judgment, the real property and the equipment thereon could be foreclosed upon. If a contractor were to successfully foreclose on such liens, we may not then be able to use such assets to manufacture our products, and our business could be materially harmed. For example, certain contractors have recently recorded liens related to tenant improvements that we have contracted to have installed at one of our leased properties.

## Risks Related to Healthcare and Other Government Regulations

***We may be unable to obtain U.S. or foreign regulatory approval and, as a result, unable to commercialize our product candidates. We are, and if we receive regulatory approval of our product candidates, will continue to be subject to ongoing extensive regulation, regulatory obligations and continued regulatory review, which may result in significant additional expense.***

Our product candidates are subject to extensive governmental regulations relating to, among other things, the research, development, testing, manufacture, quality control, import, export, safety, effectiveness, labeling, packaging, storage, distribution, record keeping, approval, advertising, promotion, marketing, post-approval monitoring and post-approval reporting of drugs and therapeutic biologics. Rigorous preclinical testing and clinical trials and an extensive regulatory review process are required to be successfully completed in the U.S. and in many foreign jurisdictions before a new drug or therapeutic biologic can be marketed. Satisfaction of these and other regulatory requirements is costly, lengthy, time-consuming, uncertain and subject to unanticipated delays and can vary substantially based upon the type, complexity and novelty of the products involved. In May 2022, we announced the submission of a BLA to the FDA for our product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease. In July 2022, we announced the FDA has accepted our BLA for review and set a target PDUFA action date of May 23, 2023. On May 9, 2023, the FDA delivered a complete response letter to us regarding the BLA, as described in greater detail in Part I, Item 2 “*Management’s Discussion and Analysis—Subsequent Events.*” It is unclear when the FDA will approve our BLA, if at all. If the FDA requires additional data, finds that the CMC information in the BLA is deficient, disagrees with our interpretation or analysis of clinical data, identifies any deficiency in our clinical data, or finds deficiencies in our pre-approval inspection, we may fail to obtain approval of the BLA for our product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease, or approval may be delayed. The letter referenced above noted deficiencies related to the FDA’s pre-license inspection of the company’s third-party contract manufacturing organizations. Satisfactory resolution of the observations noted at the pre-license inspection is required before the BLA may be approved. The FDA further provided recommendations specific to additional CMC issues and assays to be resolved. We have not submitted any other marketing or drug approval applications to the FDA or comparable foreign authorities, for any other product candidate, and we may never receive such regulatory approval for any of our product candidates or regulatory approval that will allow us to successfully commercialize our product candidates. In addition, regulatory agencies may lack experience with our technologies and products, which may lengthen the regulatory review process, increase our development costs and delay or prevent their commercialization.

Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical studies, clinical trials or other research. The number and types of preclinical studies and clinical trials that will be required for regulatory approval also vary depending on the product candidate, the disease or condition that the product candidate is designed to address and the regulations applicable to any particular product candidate. Approval policies, regulations or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate’s clinical development and may vary among jurisdictions and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates.

Any delay in completing development or obtaining, or failing to obtain, required approvals would have a material and adverse effect on our ability to generate revenue from the particular product candidate for which we are developing and seeking approval. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, be subject to other regulatory enforcement action, and we may not achieve or sustain profitability.

***Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of our product candidates in other jurisdictions.***

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, however a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory review process in others. Approval policies, procedures and requirements may vary among jurisdictions and can involve requirements and administrative review periods different from, and greater than, those in the U.S., including additional preclinical studies or clinical trials as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. For example, even if the FDA grants marketing approval of a product candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion of the product candidate in those countries. In many jurisdictions outside the U.S., a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our product candidates is also subject to approval.

Obtaining foreign regulatory approvals and establishing and maintaining compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our product candidates in certain countries. If we fail to comply with the regulatory requirements in international markets and/or fail to receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed.

***Even if we receive regulatory approval for our product candidate, Anktiva in combination with BCG for the treatment of patients with NMIBC with CIS with or without Ta or T1 disease, or any other product candidates, they will be subject to ongoing regulatory requirements, which may result in significant additional expenses. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions, and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates.***

Any regulatory approvals that we receive for our product candidates may also be subject to limitations on the approved indicated uses for which the product may be marketed, or to conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials, and surveillance to monitor safety and efficacy. In addition, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for any approved product will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, including reporting of certain adverse events as well as continued compliance with cGMP for the drug products, and GCP for any clinical trials that we conduct post-approval.

Later discovery of previously unknown problems with an approved product, including adverse events of unanticipated severity or frequency, or with manufacturing operations or processes, or failure to comply with regulatory requirements, may result in, among other things:

- holds on clinical trials;
- restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market, or voluntary or mandatory product recalls;
- imposition of a REMS, which may include distribution or use restrictions;
- requirements to conduct additional post-market clinical trials to assess the safety of the product;
- revisions to the labeling, including limitation on approved uses or the addition of additional warnings, contraindications or other safety information, including boxed warnings;
- manufacturing delays and supply disruptions where regulatory inspections identify observations of noncompliance requiring remediation;
- fines, warning or untitled letters;

- refusal by the FDA to approve pending applications or supplements to approved applications submitted by us, or withdrawal of product approvals;
- product seizure or detention, or refusal to permit the import or export of product candidates; and
- injunctions or the imposition of civil or criminal penalties.

The FDA's policies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the U.S. or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or are not able to maintain regulatory compliance, we may lose any marketing approval that may have been obtained and we may not achieve or sustain profitability, which would adversely affect our business.

***If we are unable to establish sales, marketing and distribution capabilities, we may not be successful commercializing our product candidates if and when they are approved.***

We are in the process of implementing our sales and marketing personnel hiring plan and building out key commercialization infrastructure. To achieve commercial success for any product for which we have obtained marketing approval, we will need to establish a sales and marketing team.

We expect to build a focused sales and marketing infrastructure to market our product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease, and potentially other product candidates in the U.S., if and when they are approved. There are risks involved with establishing our own sales, marketing and distribution capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, including failure to receive marketing approval from the FDA, we would have prematurely or unnecessarily incurred these commercialization expenses. We may also inaccurately estimate the number of representatives needed to build our sales force, which may result in unnecessary expense or the inability to scale as quickly as needed. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

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

- our inability to recruit, train and retain adequate numbers of effective sales, marketing, reimbursement, customer service, medical affairs, and other support personnel;
- the inability of sales personnel to obtain access to physicians or increase market acceptance of our approved product;
- the inability of reimbursement professionals to negotiate arrangements for coverage or adequate reimbursement by payors for our approved products;
- the inability to price our product candidates at a sufficient price point to ensure an adequate and attractive level of profitability;
- restricted or closed distribution channels that make it difficult to distribute our product candidates to segments of the patient population; and
- unforeseen costs and expenses associated with creating an independent commercialization organization.

If we do not establish sales, marketing and distribution capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates.

***Problems related to large-scale commercial manufacturing could cause delays in product launches, an increase in costs or shortages of product candidates.***

Manufacturing finished drug products, especially in large quantities, is complex. If our product candidates receive regulatory approval, they will require several manufacturing steps and may involve complex techniques to assure quality and sufficient quantity, especially as the manufacturing scale increases. Our product candidates will need to be made consistently and in compliance with a clearly defined manufacturing process pursuant to FDA regulations. Accordingly, it will be essential to be able to validate and control the manufacturing process to assure that it is reproducible. Slight deviations anywhere in the manufacturing process, including obtaining materials, filling, labeling, packaging, storage, shipping, quality control and testing, may result in lot failures, delay in the release of lots, product recalls or spoilage. Success rates can vary dramatically at different stages of the manufacturing process, which can lower yields and increase costs. We may experience deviations in the manufacturing process that may take significant time and resources to resolve and, if unresolved, may affect manufacturing output and cause us to fail to satisfy contractual commitments, lead to delays in our clinical trials or result in litigation or regulatory action. Such actions would hinder our ability to meet contractual obligations and could cause material adverse consequences for our business.

***If we fail to comply with U.S. and foreign regulatory requirements, regulatory authorities could limit or withdraw any marketing or commercialization approvals we may receive and subject us to other penalties that could materially harm our business. For example, our GMP-in-a-Box will be regulated by the FDA as a medical device, and regulatory compliance for medical devices is expensive, complex and uncertain, and a failure to comply could lead to enforcement actions against us and other negative consequences for our business.***

The FDA and similar agencies regulate medical devices. All of our potential medical device products and material modifications will be subject to extensive regulation and clearance or approval from the FDA and non-U.S. regulatory agencies prior to commercial sale and distribution as well as after clearance or approval. Complying with these regulations is costly, time-consuming, complex and uncertain. For instance, before a new medical device, or a new intended use for an existing device, can be marketed in the U.S., a company must first submit and receive either 510(k) clearance or pre-marketing approval from the FDA, unless an exemption applies.

Any regulatory approvals that we receive for our product candidates will require surveillance to monitor the safety and efficacy of the product candidate. The FDA and similar agencies have significant pre- and post-market authority, including requirements related to product design, development, testing, laboratory and clinical trials and preclinical studies approval, manufacturing processes and quality (including suppliers), labeling, packaging, distribution, adverse event and deviation reporting, storage, shipping, pre-market clearance or approval, advertising, marketing, promotion, sale, import, export, product change, recalls, submissions of safety and effectiveness, post-market surveillance and reporting of deaths or serious injuries and certain malfunctions, and other post-marketing information and reports such as deviation reports, registration, product listing, annual user fees, and recordkeeping for our product candidates. The FDA may also require a REMS to approve our product candidates, which may impose further requirements or restrictions on the distribution or use of an approved drug or therapeutic biologic. The FDA may also require post-approval Phase 4 trials. Moreover, the FDA and comparable foreign regulatory authorities will continue to closely monitor the safety profile of any product even after approval.

Medical devices regulated by the FDA are subject to general controls which include: registration with the FDA; listing commercially distributed products with the FDA; complying with cGMP under Quality Systems Regulations; filing reports with the FDA of and keeping records relative to certain types of adverse events associated with devices under the medical device reporting regulation; assuring that device labeling complies with device labeling requirements; reporting certain device field removals and corrections to the FDA; and obtaining pre-market notification 510(k) clearance for devices prior to marketing. Some devices known as 510(k)-exempt devices can be marketed without prior marketing-clearance or approval from the FDA. In addition to the general controls, some Class 2 medical devices are also subject to special controls, including adherence to a particular guidance document and compliance with the performance standard. Instead of obtaining 510(k) clearance, most Class 3 devices are subject to premarket approval (PMA).

The FDA can also refuse to clear or approve pre-market applications for any medical device we develop. We may not be able to obtain the necessary clearances or approvals or may be unduly delayed in doing so, for any medical device products we develop, which could harm our business. Furthermore, even if we are granted regulatory clearances or approvals for any medical device products, they may include significant limitations on the indicated uses for the product, which may limit the market for the product.

In addition, we, our contractors, and our collaborators are and will remain responsible for FDA compliance. We and any of our collaborators, including our contract manufacturers, could be subject to periodic unannounced inspections by the FDA to monitor and ensure compliance with regulatory requirements. Application holders must further notify the FDA, and depending on the nature of the change, obtain FDA pre-approval for product and manufacturing changes. The cost of compliance with post-approval regulations may have a negative effect on our operating results and financial condition.

If the FDA or comparable foreign regulatory authorities become aware of new safety information or previously unknown problems after approval of any of our product candidates, including: (i) adverse events of unanticipated severity or frequency, (ii) that the product is less effective than previously thought, (iii) problems with our third-party manufacturers or manufacturing processes, or (iv) failure to comply with regulatory requirements, or if we violate regulatory requirements at any stage, whether before or after marketing approval is obtained, we may face a number of regulatory consequences, including fines, warnings or untitled letters, holds on clinical trials, delay of approval or refusal by the FDA to approve pending applications or supplements to approved applications, suspension or withdrawal of regulatory approval, product recalls and seizures, administrative detention of products, refusal to permit the import or export of products, operating restrictions or partial suspension or total shutdown of production, injunctions, consent decrees, civil penalties and criminal prosecution, among other consequences. Additionally, we may face unanticipated expenditures to address or defend such actions and customer notifications for repair, replacement or refunds. Any such restrictions could limit sales of the product. Any of these events could further have other material and adverse effects on our operations and business and could adversely impact our stock price and could significantly harm our business, financial condition, results of operations, and prospects.

The FDA also regulates the advertising and promotion of medical devices to ensure that the claims are consistent with their regulatory clearances or approvals, that there are adequate and reasonable data to substantiate the claims and that the promotional labeling and advertising is neither false nor misleading in any respect. If the FDA determines that any of our advertising or promotional claims are misleading, not substantiated or not permissible, we may be subject to enforcement actions, including warning letters, and we may be required to revise our promotional claims and make other corrections or restitutions. Failure to comply with applicable U.S. requirements regarding, for example, promoting, manufacturing, or labeling our medical device products, may subject us to a variety of administrative or judicial actions and sanctions, such as Form 483 observations, warning letters, untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties and criminal prosecution. If any of our medical device products cause or contribute to a death or a serious injury or malfunction in certain ways, we will be required to report under applicable medical device reporting regulations, which can result in voluntary corrective actions or agency enforcement actions.

If any of these events were to occur, it would have a material and adverse effect on our business, financial condition and results of operations.

***Results for any patient who receives compassionate use access to our product candidates should not be viewed as representative of how the product candidate will perform in a well-controlled clinical trial, and cannot be used to establish safety or efficacy for regulatory approval.***

We often receive requests for compassionate use access to our investigational drugs by patients that do not meet the entry criteria for enrollment into our clinical trials. Generally, patients requesting compassionate use have no other treatment alternatives for life threatening conditions. We evaluate each compassionate use request on an individual basis, and in some cases grant access to our investigational product candidates outside of our sponsored clinical trials if a physician certifies that the patient receiving treatment is critically ill and does not meet the entry criteria for one of our open clinical trials. Individual patient results from compassionate use access may not be used to support submission of a regulatory application, may not support approval of a product candidate and should not be considered to be indicative of results from any on-going or future well-controlled clinical trial. Before we can seek regulatory approval for any of our product candidates, we must demonstrate in well-controlled clinical trials statistically significant evidence that the product candidate is both safe and effective for the indication we are seeking approval. The results of our compassionate use program may not be used to establish safety or efficacy or regulatory approval.

***We are and will be subject to U.S. and certain foreign export and import controls, sanctions, embargoes, anti-corruption laws and anti-money laundering laws and regulations. Compliance with these legal standards could impair our ability to compete in domestic and international markets. We can face criminal and/or civil liability and other serious consequences for violations, which can harm our business.***

Our product candidates will be subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls, the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. §201, the U.S. Travel Act, the USA PATRIOT Act and possibly other state and national anti-bribery and anti-money laundering laws in countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, third-party intermediaries, joint venture partners and collaborators from authorizing, promising, offering or providing, directly or indirectly, improper payments or benefits to recipients in the public or private sector. We use CROs abroad for clinical trials. In addition, we may engage third-party intermediaries to sell our product candidates and solutions abroad once we enter a commercialization phase for our product candidates and/or to obtain necessary permits, licenses, and other regulatory approvals. We or our third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities. We can be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, partners and agents, even if we do not explicitly authorize or have actual knowledge of such activities. If we fail to comply with these laws and regulations, we and certain of our employees could be subject to substantial civil or criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm and other consequences.

We have adopted an anti-corruption policy, which mandates compliance with the FCPA and other anti-corruption laws applicable to our business throughout the world. However, there can be no assurance that our employees and third-party intermediaries will comply with this policy or such anti-corruption laws. Non-compliance with anti-corruption and anti-money laundering laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution, other investigations, or other enforcement actions. If such actions are launched, or governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, results of operations and financial condition could be materially harmed. In addition, responding to any action will likely result in a materially significant diversion of management's attention and resources and significant defense and compliance costs and other professional fees. In certain cases, enforcement authorities may even cause us to appoint an independent compliance monitor, which can result in added costs and administrative burdens.

***Our failure to comply with state, national and/or international data protection laws and regulations could lead to government enforcement actions and significant penalties against us, and adversely impact our operating results.***

There are numerous laws and legislative and regulatory initiatives at the federal and state levels addressing privacy and security concerns, and some state privacy laws apply more broadly than the Health Insurance Portability and Accountability Act (HIPAA) and associated regulations. For example, California recently enacted legislation—the California Consumer Privacy Act of 2018 (CCPA)—which went into effect on January 1, 2020. The CCPA, among other things, creates new data privacy and security obligations for covered companies and provides new privacy rights to California consumers, including the right to opt out of certain disclosures of their information. The CCPA also provides for civil penalties as well as a private right of action with statutory damages for certain data breaches, thereby potentially increasing risks associated with a data breach. Although the law includes limited exceptions, including for certain information collected as part of clinical trials as specified in the law, it may regulate or impact our processing of personal information depending on the context. Additionally, a new privacy law, the California Privacy Rights Act (CPRA), was approved by California voters in November 2020 and went into effect in most material respects on January 1, 2023. The CPRA significantly modified the CCPA, which may require us to modify our practices and policies and may further increase our compliance costs and potential liability. Certain other state laws impose similar privacy obligations, and all 50 states have laws including obligations to provide notification of security breaches of computer databases that contain personal information to affected individuals, state officers and others. For example, the CCPA has prompted the enactment of several new state laws or amendments of existing state laws, such as in New York, Nevada, Virginia, and Colorado. These laws could mark the beginning of a trend toward more stringent privacy legislation in other U.S. states and have prompted a number of proposals for new federal and state-level privacy legislation. To the extent these state laws as well as other federal and state privacy laws, including new laws and changes in existing laws, apply to our business and operations, our compliance costs and potential liability with respect to personal information we collect could expose us to great liability and increase compliance costs.



There are also various laws and regulations in other jurisdictions relating to privacy and security. For example, European Union (EU) member states and other foreign jurisdictions, including Switzerland, have adopted data protection laws and regulations which impose significant compliance obligations on us. The collection and use of health data in the EU is governed by the EU General Data Protection Regulation (GDPR). The GDPR, which is wide-ranging in scope and applies extraterritorially, imposes several requirements relating to the consent of the individuals to whom the personal data relates, the information provided to such individuals, the security and confidentiality of the personal data, data breach notification, the adoption of appropriate privacy governance, including policies, procedures, training and audits, and the use of third-party processors in connection with the processing of personal data. The GDPR also imposes strict rules on the transfer of personal data out of the EU, including to the U.S., provides an enforcement authority and imposes large penalties for noncompliance, including the potential for fines of up to €20 million or up to 4% of the total worldwide annual global revenues of the noncompliant entity, whichever is greater. The GDPR requirements apply not only to third-party transactions, but also to transfers of information between us and our subsidiaries, including employee information. In addition, in January 2021, following its exit from the EU, the UK transposed the GDPR into its domestic law with its own version of the GDPR (combining the GDPR and the UK Data Protection Act of 2018) (UK GDPR), which currently imposes the same obligations as the GDPR in most material respects and provides for fines of up to £17.5 million or up to 4% of the total worldwide annual global revenues of the noncompliant entity, whichever is greater.

Complying with these numerous, complex and often changing regulations is expensive and difficult, and failure to comply with any privacy laws or data security laws or any security incident or breach involving the misappropriation, loss or other unauthorized processing, use or disclosure of sensitive or confidential patient, consumer or other personal information, whether by us, one of our CROs or business associates or another third party, could adversely affect our business, financial condition and results of operations, including but not limited to: investigation costs; material fines and penalties; compensatory, special, punitive and statutory damages; litigation; consent orders regarding our privacy and security practices; requirements that we provide notices, credit monitoring services and/or credit restoration services or other relevant services to impacted individuals; adverse actions against our licenses to do business; reputational damage; and injunctive relief. The recent implementation of the CCPA, GDPR and UK GDPR has increased our responsibility and liability in relation to personal data that we process, including in clinical trials, and we may in the future be required to put in place additional mechanisms to ensure compliance with the CCPA, GDPR, UK GDPR and other applicable laws and regulations, which could divert management's attention and increase our cost of doing business. In addition, new regulation or legislative actions regarding data privacy and security (together with applicable industry standards) may increase our costs of doing business. In this regard, we expect that there will continue to be new proposed laws, regulations and industry standards relating to privacy and data protection in the U.S., the United Kingdom, the EU and other jurisdictions, and we cannot determine the impact such future laws, regulations and standards may have on our business.

We cannot assure you that our CROs or other third-party service providers with access to our or our customers', suppliers', trial patients' and employees' personally identifiable and other sensitive or confidential information in relation to which we are responsible will not breach contractual obligations imposed by us, or that they will not experience data security breaches, which could have a corresponding effect on our business, including putting us in breach of our obligations under privacy laws and regulations and/or which could in turn adversely affect our business, results of operations and financial condition. We cannot assure you that our contractual measures and our own privacy and security-related safeguards will protect us from the risks associated with the third-party processing, use, storage and transmission of such information. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

***We and our third-party contractors must comply with environmental, health and safety laws and regulations. A failure to comply with these laws and regulations could expose us to significant costs or liabilities.***

We and any of our third-party contract manufacturers or suppliers are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, generation, manufacture, storage, treatment and disposal of hazardous materials and wastes. Hazardous chemicals, including flammable and biological materials, are involved in certain aspects of our business, and we cannot eliminate the risk of injury or contamination from the use, generation, manufacture, distribution, storage, handling, treatment or disposal of hazardous materials and wastes. In the event of contamination or injury, or failure to comply with such environmental, health and safety laws and regulations, we could be held liable for any resulting damages, fines and penalties associated with such liability, which could exceed our assets and resources.

Although we will maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of biological or hazardous materials, or wastes arising out of and in the course of employment, this insurance may not provide adequate coverage against potential liabilities. We do not maintain comprehensive insurance coverage for liabilities arising from medical or hazardous materials, environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological or hazardous materials.

Environmental, health and safety laws and regulations are becoming increasingly more stringent. We may incur substantial costs in order to comply with current or future environmental, health, and safety laws and regulations. These current or future laws and regulations may impair our research, development, or production efforts, which could harm our business, prospects, financial condition or results of operations. Our failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

***Coverage and reimbursement may be limited or unavailable in certain market segments for our product candidates, which could make it difficult for us to sell our product candidates profitably.***

In both domestic and foreign markets, sales of our product candidates, if approved, depend on the availability of coverage and adequate reimbursement from third-party payors. Third-party payors, whether domestic or foreign, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. Regulatory authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications, which could affect our ability or that of our collaborators to sell our product candidates profitably. In addition, third-party payors are requiring higher levels of evidence of the benefits and clinical outcomes of new technologies and are challenging the prices charged. Patients who are provided medical treatment for their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. Patients are unlikely to use our product candidates unless coverage is provided, and reimbursement is adequate to cover a significant portion of the cost of our product candidates. Such third-party payors include government health programs such as Medicare and Medicaid, managed care providers, private health insurers and other organizations. Obtaining coverage and adequate reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and commercial payors is critical to new product acceptance. In addition, because our product candidates represent new approaches to the treatment of cancer, we cannot accurately estimate the potential revenues from our product candidates.

Government authorities and third-party payors decide which drugs and treatments they will cover and the amount of reimbursement. Coverage decisions may depend upon clinical and economic standards that disfavor new drug products when more established or lower cost therapeutic alternatives are already available or subsequently become available. These payors may not view our products, if any, as cost-effective, and coverage and reimbursement may not be available to our customers, or those of our collaborators, or may not be sufficient to allow our products, if any, to be marketed on a competitive basis. If reimbursement is not available, or is available only to limited levels, our product candidates may be competitively disadvantaged, and we, or our collaborators, may not be able to successfully commercialize our product candidates. Alternatively, securing favorable reimbursement terms may require us to compromise pricing and prevent us from realizing an adequate margin over cost. Reimbursement by a third-party payor may depend upon a number of factors, including, but not limited to, the third-party payor's determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

In the U.S., no uniform policy of coverage and reimbursement for products exists among third-party payors. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our product candidates to each payor separately, with no assurance that coverage and adequate reimbursement will be obtained. Moreover, the factors noted above have continued to be the focus of policy and regulatory debate that has, thus far, shown the potential for movement towards permanent policy changes; this trend is likely to continue, and may result in more or less favorable impacts on pricing. The recent and ongoing series of congressional hearings relating to drug pricing has presented heightened attention to the biopharmaceutical industry, creating the potential for political and public pressure, while the potential for resulting legislative or policy changes presents uncertainty. Congress is considering legislation that, if passed, could have significant impact on prices of prescription drugs covered by Medicare, including limitations on drug price increases. The impact of these regulations and any future healthcare measures and agency rules implemented by the Biden administration on us and the pharmaceutical industry as a whole is currently unknown. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our product candidates if approved. Complying with any new legislation and regulatory changes could be time-intensive and expensive, resulting in a material adverse effect on our business.

Prices paid for a drug also vary depending on the class of trade. Prices charged to government customers are subject to price controls, including ceilings, and private institutions obtain discounts through group purchasing organizations. Net prices for drugs may be further reduced by mandatory discounts or rebates required by government healthcare programs and demanded by private payors. It is also not uncommon for market conditions to warrant multiple discounts to different customers on the same unit, such as purchase discounts to institutional care providers and rebates to the health plans that pay them, which reduces the net realization on the original sale.

In addition, federal programs impose penalties on manufacturers of drugs marketed under a BLA or NDA, in the form of mandatory additional rebates and/or discounts if commercial prices increase at a rate greater than the Consumer Price Index-Urban, and these rebates and/or discounts, which can be substantial, may impact our ability to raise commercial prices. For example, under the American Rescue Plan Act of 2021, effective January 1, 2024, the statutory cap on Medicaid Drug Rebate Program rebates that manufacturers pay to state Medicaid programs will be eliminated. Elimination of this cap may require pharmaceutical manufacturers to pay more in rebates than it receives on the sale of products, which could have a material impact on our business. In August 2022, Congress passed the Inflation Reduction Act of 2022, which includes prescription drug provisions that have significant implications for the pharmaceutical industry and Medicare beneficiaries, including allowing the federal government to negotiate a maximum fair price for certain high-priced single source Medicare drugs, imposing penalties and excise tax for manufacturers that fail to comply with the drug price negotiation requirements, requiring inflation rebates for all Medicare Part B and Part D drugs, with limited exceptions, if their drug prices increase faster than inflation, and redesigning Medicare Part D to reduce out-of-pocket prescription drug costs for beneficiaries, among other changes. The impact of these legislative, executive, and administrative actions and any future healthcare measures and agency rules implemented by the Biden administration on us and the pharmaceutical industry as a whole is unclear. Cost control initiatives could cause us, or our collaborators, to decrease, discount, or rebate a portion of the price we, or they, might establish for products, which could result in lower than anticipated product revenues. If the realized prices for our product candidates, if any, decrease or if governmental and other third-party payors do not provide adequate coverage or reimbursement, our prospects for revenues and profitability will suffer.

Even if we obtain coverage for a given product, the resulting approved reimbursement payment rates might not be high enough to allow us to establish or maintain a market share sufficient to realize a sufficient return on our or their investments or achieve or sustain profitability or may require co-payments that patients find unacceptably high. If payors subject our product candidates to maximum payment amounts or impose limitations that make it difficult to obtain reimbursement, providers may choose to use therapies which are less expensive when compared to our product candidates. Additionally, if payors require high co-payments, beneficiaries may decline prescriptions and seek alternative therapies. We may need to conduct post-marketing studies in order to demonstrate the cost-effectiveness of any future products to the satisfaction of hospitals and other target customers and their third-party payors. Such studies might require us to commit a significant amount of management time and financial and other resources. Our future products might not ultimately be considered cost-effective. Adequate third-party coverage and reimbursement might not be available to enable us to maintain price levels sufficient to realize an appropriate return on investment in product development.

We, and our collaborators, cannot be sure that coverage will be available for any product candidate that we, or they, commercialize and, if available, that the reimbursement rates will be adequate. Further, the net reimbursement for drug products may be subject to additional reductions if there are changes to laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the U.S. An inability to promptly obtain coverage and adequate payment rates from both government-funded and private payors for any of our product candidates for which we obtain marketing approval could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products, and our overall financial condition.

There have been, and likely will continue to be, legislative and regulatory proposals at the federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. We cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

- the demand for our product candidates, if we obtain regulatory approval;
- our ability to set a price that we believe is fair for our product candidates;
- our ability to generate revenues and achieve or maintain profitability;
- the level of taxes that we are required to pay; and
- the availability of capital.

Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors, which may adversely affect our future profitability. A particular challenge for our product candidates arises from the fact that they will primarily be used in an inpatient setting. Inpatient reimbursement generally relies on stringent packaging rules that may mean that there is no separate payment for our product candidates. Additionally, data used to set the payment rates for inpatient admissions is usually several years old and would not take into account all of the additional therapy costs associated with the administration of our product candidates. If special rules are not created for reimbursement for immunotherapy treatments such as our product candidates, hospitals might not receive enough reimbursement to cover their costs of treatment, which will have a negative effect on their adoption of our product candidates.

***We may face difficulties from changes to current regulations and future legislation.***

In the U.S. and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities, and affect our ability, or the ability of our collaborators, to profitably sell any products for which we obtain marketing approval. We expect that current laws, as well as other federal and state healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria, increased regulatory burdens and operating costs, decreased revenues from our biopharmaceutical product candidates, decreased potential returns from our development efforts, and additional downward pressure on the price that we, or our collaborators, may receive for any approved products.

Since enactment of the Affordable Care Act (ACA) in 2010, in both the U.S. and certain foreign jurisdictions, there have been a number of legislative and regulatory changes to the health care system that could impact our ability to sell our product candidates profitably. These changes included aggregate reductions of Medicare payments to providers of up to 2% per fiscal year, effective April 1, 2013, which, due to subsequent legislative amendments, will stay in effect through 2031, with the exception of a temporary suspension implemented under various COVID-19 relief legislation from May 1, 2020 through March 31, 2022. Under current legislation, the actual reduction in Medicare payments can vary from 1% in 2022 to up to 4% in the final fiscal year of this sequester. In January 2013, the American Taxpayer Relief Act of 2012 (ATRA) was approved which, among other things, reduced Medicare payments to several providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on customers for our product candidates, if approved, and accordingly, our financial operations.

Since its enactment, various portions of the ACA have been subject to judicial and constitutional challenges. In June 2021, the U.S. Supreme Court held that Texas and other challengers had no legal standing to challenge the ACA, dismissing the case without specifically ruling on the constitutionality of the ACA. Accordingly, the ACA remains in effect in its current form. It is unclear how this Supreme Court decision, future litigation, or healthcare measures promulgated by the Biden administration will impact our business, financial condition and results of operations. Complying with any new legislation or reversing changes implemented under the ACA could be time-intensive and expensive, resulting in a material adverse effect on our business.

Any reduction in reimbursement from Medicare or other government healthcare programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenues, attain profitability or commercialize our product candidates.

Legislative and regulatory proposals may also be made to expand post-approval requirements and restrict sales and promotional activities for drugs. We cannot be sure whether additional legislative changes will be enacted, or whether the FDA regulations, guidance, or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be. In addition, increased scrutiny by Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing testing and other requirements.

In addition, there have been increasing legislative efforts and enforcement interest in the U.S. with respect to drug pricing practices, including Congressional inquiries and proposed federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. As discussed above, in August 2022, Congress passed the Inflation Reduction Act of 2022, which includes prescription drug provisions that have significant implications for the pharmaceutical industry and Medicare beneficiaries, including allowing the federal government to negotiate a maximum fair price for certain high-priced single source Medicare drugs, imposing penalties and excise tax for manufacturers that fail to comply with the drug price negotiation requirements, requiring inflation rebates for all Medicare Part B and Part D drugs, with limited exceptions, if their drug prices increase faster than inflation, and redesigning Medicare Part D to reduce out-of-pocket prescription drug costs for beneficiaries, among other changes. The impact of these legislative, executive, and administrative actions and any future healthcare measures and agency rules implemented by the Biden administration on us and the pharmaceutical industry as a whole is unclear. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

We are unable to predict the future course of federal or state healthcare legislation in the U.S. directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. The ACA and any further changes in the law or regulatory framework that reduce our revenues or increase our costs could also have a material and adverse effect on our business, financial condition and results of operations. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our current product candidates and any future product candidates or additional pricing pressures.

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

In international markets, reimbursement and health care payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies. In some countries, particularly the countries of the EU, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain coverage and reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. There can be no assurance that our product candidates will be considered cost-effective by third-party payors, that an adequate level of reimbursement will be available, or that the third-party payors' reimbursement policies will not adversely affect our ability to sell our product candidates profitably. If reimbursement of our product candidates is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be harmed, possibly materially.

***Our employees, independent contractors, consultants, commercial partners, principal investigators, CROs, suppliers and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.***

We are exposed to the risk of employee fraud or other illegal activity by our employees, independent contractors, consultants, commercial partners, principal investigators, CROs, suppliers and vendors. Misconduct by these parties could include intentional, reckless and/or negligent conduct that fails to: comply with the laws of the FDA and other similar foreign regulatory bodies, provide true, complete and accurate information to the FDA and other similar foreign regulatory bodies, comply with manufacturing standards we have established, comply with healthcare fraud and abuse laws in the U.S. and similar foreign fraudulent misconduct laws, or report financial information or data accurately or to disclose unauthorized activities to us. If we obtain FDA approval of any of our product candidates and begin commercializing those product candidates in the U.S., our potential exposure under such laws will increase significantly, and our costs associated with compliance with such laws are also likely to increase. In particular, the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws and regulations designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, structuring and commission(s), certain customer incentive programs and other business arrangements. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials, which could result in regulatory sanctions and serious harm to our reputation.

It is not always possible to identify and deter misconduct or other improper activities by our employees or third parties that we engage for our business operations and the precautions we take to detect and prevent inappropriate conduct may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a material adverse effect on our business, financial condition, results of operations and prospects, including the imposition of significant fines or other sanctions, including exclusion from government healthcare programs, and serious harm to our reputation. In addition, the approval and commercialization of any of our product candidates outside the U.S. will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws. Efforts to ensure that our business arrangements will comply with applicable healthcare laws may involve substantial costs.

***Our relationships with health care professionals, institutional providers, principal investigators, consultants, potential customers and third-party payors are, and will continue to be, subject, directly and indirectly, to federal and state health care fraud and abuse, false claims, marketing expenditure tracking and disclosure, government price reporting, and privacy and data security laws. If we are unable to comply, or have not fully complied, with such laws, we could face significant penalties and liabilities.***

Our business operations and activities may be directly or indirectly subject to various federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute and the federal False Claims Act. If we obtain FDA approval for any of our product candidates and begin commercializing those product candidates in the U.S., our potential exposure under such laws will increase significantly, and our costs associated with compliance with such laws are also likely to increase. Our current and future arrangements with healthcare professionals, clinical investigators, CROs, third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our products for which we obtain marketing approval. In addition, we may be subject to laws of the federal government and state governments in which we conduct our business relating to privacy and data security with respect to patient information. The laws that may affect our ability to operate include, but are not limited to:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons and entities from soliciting, receiving or providing remuneration, directly or indirectly, to induce either the referral of an individual for a healthcare item or service, or the purchasing or ordering of an item or service, for which payment may be made under a federal healthcare program such as Medicare or Medicaid;
- the U.S. federal false claims and civil monetary penalties laws, including the federal civil False Claims Act, which prohibit, among other things, individuals or entities from knowingly presenting or causing to be presented, claims for payment by government funded programs such as Medicare or Medicaid that are false or fraudulent, and which may apply to us by virtue of statements and representations made to customers or third parties;

- HIPAA, which created additional federal criminal statutes that prohibit, among other things, knowingly and willfully executing or attempting to execute a scheme to defraud healthcare programs;
- HIPAA, as amended by HITECH, which imposes requirements on certain types of people and entities relating to the privacy, security, and transmission of individually identifiable PHI, and requires notification to affected individuals and regulatory authorities of certain breaches of security of PHI;
- the federal Physician Payment Sunshine Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid, or the Children's Health Insurance Program, to report annually to the Centers for Medicare & Medicaid Services (CMS) information related to payments and other transfers of value to covered recipients, including physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), other healthcare providers (such as physician assistants and nurse practitioners) and teaching hospitals, and ownership and investment interests held by physicians and their immediate family members, which is published in a searchable form on an annual basis;
- federal criminal laws that prohibit executing a scheme to defraud any healthcare benefit program or making, or causing to be made, false statements relating to healthcare matters;
- the federal Civil Monetary Penalties Law, which prohibits, among other things, offering or transferring remuneration to a federal healthcare beneficiary that a person knows or should know is likely to influence the beneficiary's decision to order or receive items or services reimbursable by the government from a particular provider or supplier;
- the FCPA, the U.K. Bribery Act of 2010, and other local anti-corruption laws that apply to our international activities; and
- state laws comparable to each of the above federal laws, such as, for example, anti-kickback and false claims laws that may be broader in scope and also apply to commercial insurers and other non-federal payors, requirements for mandatory corporate regulatory compliance programs, and laws relating to patient data privacy and security. Other state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government; require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state and foreign laws govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

We expect to incur increased costs of compliance with such laws and regulations as they continue to evolve. If we or our contractors are unable to comply, or have not fully complied, with such laws, we could face penalties, including, without limitation, civil, criminal, and administrative penalties, damages, monetary fines, disgorgement, possible exclusion from participation in Medicare, Medicaid and other federal and state health care programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations. Any of these could adversely affect our business, financial condition, and results of operations.

### **Risks Related to Intellectual Property**

***If we are unable to obtain, maintain, protect and enforce patent protection and other proprietary rights for our product candidates and technologies, we may not be able to compete effectively or operate profitably and our ability to prevent our competitors from commercializing similar or identical technology and product candidates would be adversely affected.***

Our success is dependent in large part on our obtaining, maintaining, protecting and enforcing patents and other proprietary rights in the U.S. and other countries with respect to our product candidates and technology and on our ability to avoid infringing the intellectual property and other proprietary rights of others. Certain of our intellectual property rights are licensed from other entities, and as such the preparation and prosecution of any such patents and patent applications was not performed by us or under our control. Furthermore, patent law relating to the scope of claims in the biotechnology field in which we operate is still evolving and, consequently, patent positions in our industry may not be as strong as in other more well-established fields. The patent positions of biotechnology and pharmaceutical companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved and has been the subject of much litigation in recent years. No consistent policy regarding the breadth of claims allowed in biotechnology patents has emerged to date. As a result, the issuance, scope, validity, enforceability, or commercial value of our patent rights remain highly uncertain.

Any future patents we obtain may not be sufficiently broad to prevent others from using our technology or from developing competing therapeutics and technology. There is no guarantee that any of our pending patent applications will result in issued or granted patents, any of our issued or granted patents will not later be found to be invalid or unenforceable, or any issued or granted patents will include claims sufficiently broad to cover our product candidates and technology, or to provide meaningful protection from our competitors. Our owned or in-licensed pending and future patent applications may not result in patents being issued that protect our N-803, saRNA, hAd5 and yeast technologies, cell-based therapies, aldoxorubicin or other product candidates and technologies or that effectively prevent others from commercializing competitive technologies and product candidates.

Moreover, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Even if patent applications we license or own currently or in the future issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors or other third parties from competing with us, or otherwise provide us with any competitive advantage. Any patents that we own or in-license may be challenged, narrowed, circumvented, or invalidated by third parties. Consequently, we do not know whether our N-803, saRNA, hAd5 and yeast technologies, cell-based therapies or other product candidates and technologies will be protectable or remain protected by valid and enforceable patents. Our competitors or other third parties may be able to circumvent our patents by developing similar or alternative technologies or products in a non-infringing manner which could materially adversely affect our business, financial condition, results of operations and growth prospects.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability and it is uncertain how much protection, if any, will be provided by our patents, including if they are challenged in the courts or patent offices or in other proceedings, such as re-examinations or oppositions, which may be brought in the U.S. or foreign jurisdictions to challenge the validity of a patent. A third party may challenge the validity or enforceability of a patent after its issuance. It is possible that a competitor may successfully challenge our patents or that a challenge will result in limiting their coverage. Moreover, it is possible that competitors may infringe our patents or successfully avoid the patented technology through design innovation. To counter infringement or other unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming, even if we were successful in stopping the violation of our patent rights.

We or our licensors may be subject to a third-party preissuance submission of prior art to the USPTO, or become involved in opposition, derivation, revocation, reexamination, post-grant and *inter partes* review, or interference proceedings or other similar proceedings challenging our owned or licensed patent rights. Should third parties file patent applications, or be issued patents claiming technology also used or claimed by our licensor(s) or by us in any future patent application, we, or one of our licensors, may be required to participate in interference proceedings in the USPTO to determine priority of invention for those patents or patent applications that are subject to the first-to-invent law in the U.S., or may be required to participate in derivation proceedings in the USPTO for those patents or patent applications that are subject to the first-inventor-to-file law in the U.S. We may be required to participate in such interference or derivation proceedings involving our issued patents and pending applications. We may also be required to participate in post-grant challenge proceedings, such as oppositions in a foreign patent office, that challenge our or our licensor's priority of invention or other features of patentability with respect to our owned or in-licensed patents and patent applications. Such challenges may result in loss of patent rights, loss of exclusivity, or in patent claims being narrowed, invalidated, or held unenforceable, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our N-803, saRNA, hAd5 and yeast technologies, cell-based therapies or other product candidates and technologies. For example, one of our European patents, EP 3601363, has recently been opposed by a third party. We intend to defend our patent and believe we have meritorious defenses against this opposition. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate or render unenforceable, our owned or in-licensed patent rights, allow third parties to commercialize our N-803, saRNA, hAd5 and yeast technologies, cell-based therapies or other product candidates or technologies and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights.



If we or our collaborators are unsuccessful in any such proceeding or other priority or inventorship dispute, we may be required to cease using the technology or to obtain and maintain license rights from prevailing third parties, including parties involved in any such interference proceedings or other priority or inventorship disputes. A prevailing party in that case may not offer us a license on commercially acceptable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us, and it could require us to make substantial licensing and royalty payments. If we are unable to obtain and maintain such licenses, we may need to cease the development, manufacture, and commercialization of one or more of the product candidates we may develop. The loss of exclusivity or the narrowing of our owned and licensed patent claims could limit our ability to stop others from using or commercializing similar or identical technology and products. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, given the amount of time required for the development, testing, and regulatory review of new product candidates, patents protecting such product candidates might expire before or shortly after such product candidates are commercialized. As a result, our intellectual property may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

Some of our owned and in-licensed patents and patent applications are, and may in the future be, co-owned with third parties. In addition, certain of our licensors co-own the patents and patent applications we in-license with other third parties with whom we do not have a direct relationship. Our exclusive rights to certain of these patents and patent applications are dependent, in part, on inter-institutional or other operating agreements between the joint owners of such patents and patent applications, who are not parties to our license agreements. If our licensors do not have exclusive control of the grant of licenses under any such third-party co-owners' interest in such patents or patent applications or we are otherwise unable to secure such exclusive rights, such co-owners may be able to license their rights to other third parties, including our competitors, and our competitors could market competing products and technology. In addition, we may need the cooperation of any such co-owners of our patents in order to enforce such patents against third parties, and such cooperation may not be provided to us. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and growth prospects.

***If any of our owned or in-licensed patent applications do not issue as patents in any jurisdiction, we may not be able to compete effectively.***

Changes in either the patent laws or their interpretation in the U.S. and other countries may diminish our ability to protect our inventions, obtain, maintain, and enforce our intellectual property rights and, more generally, could affect the value of our intellectual property or narrow the scope of our owned and licensed patents. With respect to both in-licensed and owned intellectual property, we cannot predict whether the patent applications we and our licensors are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient protection from competitors or other third parties. The patent prosecution process is expensive, time-consuming, and complex, and we may not be able to file, prosecute, maintain, enforce, or license all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output in time to obtain patent protection. Although we enter into nondisclosure and confidentiality agreements with parties who have access to confidential or patentable aspects of our research and development output, such as our employees, corporate collaborators, outside scientific collaborators, CROs, CMOs, consultants, advisors, and other third parties, any of these parties may breach the agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection. In addition, our ability to obtain and maintain valid and enforceable patents depends on whether the differences between our inventions and the prior art allow our inventions to be patentable over the prior art. Furthermore, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the U.S. and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain that we or our licensors were the first to make the inventions claimed in any of our owned or licensed patents or pending patent applications, or that we or our licensors were the first to file for patent protection of such inventions.

***We or our licensors, collaborators, or any future strategic partners may become subject to third-party claims or litigation alleging infringement of patents or other proprietary rights or seeking to invalidate patents or other proprietary rights, and we may need to resort to litigation to protect or enforce our patents or other intellectual property or the patents or other intellectual property of our licensors, all of which could be expensive, time-consuming and unsuccessful, may delay or prevent the development and commercialization of our product candidates, or may put our patents and other proprietary rights at risk.***

If we or one of our licensors initiate legal proceedings against a third party to enforce a patent covering one of our product candidates or other technologies, the defendant could counterclaim that the patent is invalid and/or unenforceable or that we infringe their patents. In patent litigation in the U.S., defendant counterclaims alleging invalidity and/or unenforceability are commonplace, and there are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO or other applicable body, or made a misleading statement, during prosecution. Third parties may also raise similar claims before administrative bodies in the U.S. or abroad, even outside the context of litigation. Such mechanisms include re-examination, post grant review, *inter partes* review, interference proceedings, derivation proceedings, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings).

With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we, our licensor, our or our licensor's patent counsel and the patent examiner were unaware during prosecution. Moreover, even if our patents were to survive such a litigation challenge to their validity, the patents might still be held to be valid but unenforceable if a court were to decide that the patents are being enforced in a manner inconsistent with the antitrust laws, or that the patents were obtained through deceit during patent office examination or other such failure of sufficient candor to the patent office. If a third party were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates. Such a loss of patent protection could have a material adverse impact on our business, financial condition, results of operations and prospects. One of our European patents, EP3601363, has recently been opposed by a third party. We intend to defend our patent and believe we have meritorious defenses against this opposition.

The cost to us of any litigation or other proceeding relating to intellectual property rights, even if resolved in our favor, could be substantial. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources, including our scientists and management, from our business.

An adverse result in any litigation or defense proceeding could put one or more of our owned or licensed patents at risk of being invalidated, held unenforceable, or interpreted narrowly, and could put our patent applications at risk of not issuing. Such proceedings could result in revocation or cancellation of, or amendment to, our patents in such a way that they no longer cover our product candidates or technologies. If the outcome of litigation is adverse to us, third parties may be able to use our patented invention without payment to us. In addition, in an infringement proceeding, there is a risk that a court may decide that one or more of our patents is not valid or is unenforceable and that we do not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity of our patents were upheld, a court would refuse to stop the other party on the grounds that its activities are not covered by, that is, do not infringe, our patents. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

In addition, there could be public announcements of the results of hearings, motions, or other interim proceedings or developments, and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing, or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be better able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. The outcome following legal assertions of invalidity and unenforceability is unpredictable. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

***The use of our technology and product candidates could potentially conflict with the rights of others, and third-party claims of intellectual property infringement, misappropriation or other violation against us, our licensors or our collaborators may prevent or delay the development and commercialization of our product candidates and technologies.***

Our commercial success depends in part on our, our licensors' and our collaborators' ability to avoid infringing, misappropriating and otherwise violating the patents and other intellectual property rights of third parties. There is a substantial amount of complex litigation involving patents and other intellectual property rights in the biopharmaceutical industry. Our potential competitors or other parties may have, develop or acquire patent or other intellectual property rights that they could assert against us. If they do so, then we may be required to alter our product candidates, pay licensing fees or cease our development and commercialization activities with respect to the applicable product candidates or technologies. If our product candidates conflict with patent or other intellectual property rights of others, such parties could bring legal actions against us or our collaborators, licensees, suppliers or customers, claiming damages and seeking to enjoin manufacturing, use and marketing of the affected products.

Although we have conducted freedom-to-operate (FTO) analyses of the patent landscape with respect to our lead product candidates and continue to undertake FTO analyses of our manufacturing processes, our product candidate, Anktiva in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease, and contemplated future processes and products, because patent applications do not publish for 18 months, and because the claims of patent applications can change over time, no FTO analysis can be considered exhaustive. We may not be aware of patents that have already been issued and that a competitor or other third party might assert are infringed by our current or future product candidates or technologies. It is also possible that we could be found to have infringed patents owned by third parties of which we are aware, but which we do not believe are relevant to our product candidates or technologies. In addition, because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our product candidates or technologies may infringe. Furthermore, patent and other intellectual property rights in biotechnology remains an evolving area with many risks and uncertainties. As such, we may not be able to ensure that we can market our product candidates without conflict with the rights of others.

If intellectual property-related legal actions asserted against us are successful, in addition to any potential liability for damages (including treble damages and attorneys' fees for willful infringement), we could be enjoined from, or required to obtain a license to continue, manufacturing, promoting the use of or marketing the affected products. We may not prevail in any legal action and a required license under the applicable patent or other intellectual property may not be available on acceptable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us, and it could require us to make substantial licensing and royalty payments. We also could be required to redesign our infringing products, which may be impossible or require substantial time and monetary expenditure.

Defense of infringement claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of management and other employee resources from our business, and may impact our reputation. Some of our competitors may be able to sustain the costs of litigation or administrative proceedings more effectively than we can because of greater financial resources. In addition, there could be public announcements of the results of hearings, motions, or other interim proceedings or developments, and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. The occurrence of any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

***Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.***

As is the case with other immunotherapy and biopharmaceutical companies, our success is dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve both technological and legal complexity, and is therefore costly, time-consuming and inherently uncertain. In addition, the U.S. has recently enacted and is currently implementing wide-ranging patent reform legislation. Assuming that other requirements for patentability are met, prior to March 2013, in the U.S., the first to invent the claimed invention was entitled to the patent, while outside the U.S., the first to file a patent application was entitled to the patent. After March 2013, under the Leahy-Smith America Invents Act (the America Invents Act) enacted in September 2011, the U.S. transitioned to a first-to-file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. A third party that files a patent application in the USPTO after March 2013, but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us to be cognizant of the time from invention to filing of a patent application. Since patent applications in the U.S. and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we or our licensors were the first to either file any patent application related to our product candidates or other technologies or invent any of the inventions claimed in our or our licensor's patents or patent applications. The America Invents Act also includes a number of significant changes that affect the way patent applications will be prosecuted and also may affect patent litigation. These include allowing third-party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO-administered post-grant proceedings, including post-grant review, *inter partes* review, and derivation proceedings. Therefore, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our owned or in-licensed patent applications and the enforcement or defense of our owned or in-licensed issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Additionally, U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. While we do not believe that any of the patents owned or licensed by us will be found invalid based on the foregoing, we cannot predict how future decisions by Congress, the federal courts or the USPTO may impact the value of our patents.

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

Periodic maintenance fees, renewal fees, annuity fees, and various other government fees on patents and patent applications are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of a patent. The USPTO and various foreign governmental patent agencies require compliance with several procedural, documentary, fee payment and other similar provisions during the patent application process. In certain circumstances, we rely on our licensors to pay these fees and take the necessary actions to comply with these requirements. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, our competitors might be able to enter the market with similar or identical products or technology, which would have a material adverse impact on our business, financial condition, results of operations and prospects.

***Our rights to develop and commercialize our product candidates and technologies are subject, in part, to the terms and conditions of licenses granted to us by others.***

We will rely on licenses to certain patent rights and proprietary technology from third parties that are important or necessary to the development of aldoxorubicin as well as products enabled by our adenoviral and yeast, including Tarmogen, vaccine technologies, and saRNA technology.

License agreements may not provide exclusive rights to use certain licensed intellectual property and technology in all relevant fields of use and in all territories in which we may wish to develop or commercialize our technology and product candidates in the future. As a result, we may not be able to prevent competitors or other third parties from developing and commercializing competitive products that also utilizes technology that we have in-licensed.

In addition, subject to the terms of any such license agreements, we do not have the right to control the preparation, filing, prosecution and maintenance, and we may not have the right to control the enforcement, and defense of patents and patent applications covering the technology that we license from third parties. We cannot be certain that our in-licensed or out-licensed patents and patent applications that are controlled by our licensors or licensees will be prepared, filed, prosecuted, maintained, enforced, and defended in a manner consistent with the best interests of our business. If our licensors or licensees fail to prosecute, maintain, enforce, and defend such patents, or lose rights to those patents or patent applications, the rights we have licensed may be reduced or eliminated, our right to develop and commercialize N-803 and any of our product candidates that are subject of such licensed rights could be adversely affected, and we may not be able to prevent competitors from making, using and selling competing products. In addition, even where we have the right to control patent prosecution of patents and patent applications we have licensed to and from third parties, we may still be adversely affected or prejudiced by actions or inactions of our licensees, our licensors and their counsel that took place prior to the date upon which we assumed control over patent prosecution.

Furthermore, our owned and in-licensed patents may be subject to a reservation of rights by one or more third parties. For example, certain of our in-licensed intellectual property was funded in part by the U.S. government. As a result, the U.S. government may have certain rights to such intellectual property. When new technologies are developed with U.S. government funding, the U.S. government generally obtains certain rights in any resulting patents, including a non-exclusive license authorizing the U.S. government to use the invention or to have others use the invention on its behalf. The U.S. government's rights may also permit it to disclose the funded inventions and technology to third parties and to exercise march-in rights to use or allow third parties to use the technology we have licensed that was developed using U.S. government funding. The U.S. government may exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the government-funded technology, or because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to U.S. industry. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the U.S. in certain circumstances if this requirement is not waived. Any exercise by the U.S. government of such rights or by any third party of its reserved rights could have a material adverse effect on our competitive position, business, financial condition, results of operations and growth prospects.

***If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties or otherwise experience disruptions to our business relationships with our licensors, we may be required to pay damages and we could lose license rights that are important to our business.***

We have entered into license agreements with third parties and may need to obtain additional licenses from others to advance our research or allow commercialization of our product candidates. We may be unable to obtain certain additional licenses at a reasonable cost or on reasonable terms, if at all. In that event, we may be required to expend significant time and resources to redesign our technology, product candidates, or the methods for manufacturing them or to develop or license replacement technology, all of which may not be feasible on a technical or commercial basis. If we are unable to do so, we may be unable to develop or commercialize the affected product candidates or continue to utilize our existing technology, which could harm our business, financial condition, results of operations and growth prospects significantly. We cannot provide any assurances that third-party patents do not exist which might be enforced against our current technology, manufacturing methods, product candidates, or future methods or products resulting in either an injunction prohibiting our manufacture or future sales, or, with respect to our future sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties, which could be significant.

In addition, each of our license agreements, and we expect our future agreements, will impose various development, diligence, commercialization, and other obligations on us. Certain of our license agreements also require us to meet development timelines, or to exercise commercially reasonable efforts to develop and commercialize licensed products, in order to maintain the licenses. In spite of our efforts, our licensors might conclude that we have materially breached our obligations under such license agreements and might therefore terminate the license agreements, thereby removing or limiting our ability to develop and commercialize products and technology covered by these license agreements. If these in-licenses are terminated, or if the underlying patents fail to provide the intended exclusivity, competitors or other third parties would have the freedom to seek regulatory approval of, and to market, products identical to ours and we may be required to cease our development and commercialization of certain of our product candidates or of N-803. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and growth prospects.

Moreover, disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under our collaborative development relationships;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

In addition, the agreements under which we currently license intellectual property or technology from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and growth prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates, which could have a material adverse effect on our business, financial conditions, results of operations and growth prospects.

***We have limited foreign intellectual property rights and may not be able to protect our intellectual property rights in various jurisdictions throughout the world.***

We have limited intellectual property rights outside the U.S. Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the U.S. can be less extensive than those in the U.S. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the U.S. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the U.S., or from selling or importing products made using our inventions in and into the U.S. or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the U.S. These products may compete with our product candidates and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property protection, particularly those relating to biopharmaceutical products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we or any of our licensors is forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired, and our business, financial condition, results of operations and prospects may be adversely affected.

***We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed trade secrets or other confidential information of third parties or claims asserting ownership of what we regard as our own intellectual property.***

We have received confidential and proprietary information from third parties and their employees and contractors. In addition, we plan to employ and contract with individuals who were previously employed at other biotechnology or pharmaceutical companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed the trade secrets or other confidential information of these third parties or our employees' former employers. Litigation may be necessary to defend against or pursue these claims. Even if we are successful in resolving these claims, litigation could result in substantial cost and be a distraction to our management and employees.

In addition, while it is our policy to require our employees, consultants and independent contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations, and prospects.

***We may not be able to license or acquire new or necessary intellectual property rights or technology from third parties.***

An element of our intellectual property strategy is to license intellectual property rights and technologies from third parties and/or our affiliates. Other parties, including our competitors or our affiliates, may have patents relevant to our business, may have already filed patent applications relevant to our business, and are likely filing patent applications potentially relevant to our business. In order to avoid infringing these patents, we may find it necessary or prudent to obtain licenses to such patents from such parties. In addition, with respect to any patents we co-own with other parties, including our affiliates, we may require licenses to such co-owners' interest to such patents. The licensing or acquisition of intellectual property rights is a competitive area, and other more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources, and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all.

No assurance can be given that we will be successful in licensing any additional rights or technologies from third parties and/or our affiliates. Our inability to license the rights and technologies that we have identified, or that we may in the future identify, could have a material adverse impact on our ability to complete the development of our product candidates or to develop additional product candidates. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us, and it could require us to make substantial licensing and royalty payments. Failure to obtain any necessary rights or licenses may detrimentally affect our planned development of our current or future additional product candidates and could increase the cost, and extend the timelines associated with our development, of such other products, and we may have to abandon development of the relevant program or product candidate. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

***If we do not obtain patent term extension and data exclusivity for any product candidates we may develop, our business may be materially harmed.***

Depending upon the timing, duration and specifics of any FDA marketing approval of any product candidates we may develop, one or more of our owned or in-licensed U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984 (the Hatch-Waxman Act). The Hatch-Waxman Act permits a patent term extension of up to five years as compensation for patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval. Only one patent may be extended per new drug, and only those claims covering the approved drug, a method for using it, or a method for manufacturing it may be extended. Similar extensions as compensation for patent term lost during regulatory review processes are also available in certain foreign countries and territories, such as in Europe under a Supplementary Patent Certificate. However, we may not be granted an extension in the U.S. and/or foreign countries and territories because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents, or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or the term of any such extension is shorter than what we request, our competitors may obtain approval of competing products following our patent expiration, and our business, financial condition, results of operations and growth prospects could be materially harmed.

***We may be subject to claims challenging rights in our patents and other intellectual property.***

We or our licensors may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or in-licensed patents, trade secrets, or other intellectual property, including as an inventor or co-inventor. For example, we or our licensors may have disputes arise from conflicting obligations of employees, consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship, or our or our licensors' ownership of our owned or in-licensed patents, trade secrets or other intellectual property. If we or our licensors fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of or right to use valuable intellectual property. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

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

In addition to seeking patents for N-803, saRNA, hAd5 and yeast technologies, cell therapies, and other product candidates and technologies, we also rely on trade secrets and confidentiality agreements to protect our unpatented know-how, technology, and other proprietary information and to maintain our competitive position. Trade secrets and know-how can be difficult to protect. We expect our trade secrets and know-how will over time be disseminated within the industry through independent development, the publication of journal articles describing the methodology, and the movement of personnel from academic to industry scientific positions.



We seek to protect these trade secrets and other proprietary technology, in part, by entering into nondisclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, CROs, CMOs, consultants, advisors, and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants as well as train our employees not to bring or use proprietary information or technology from former employers to us or in their work, and remind former employees when they leave their employment of their confidentiality obligations. We cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or proprietary technology and processes. Despite our efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive, and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the U.S. are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third party, we would have no right to prevent them from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor or other third party, our competitive position would be materially and adversely harmed.

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

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors or other third parties may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. 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. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our business, financial condition, results of operations and growth prospects.

***Intellectual property rights do not necessarily address all potential threats.***

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make products that are similar to our product candidates or utilize similar technology but that are not covered by the claims of the patents that we license or may own;
- we, or our current or future licensors or collaborators, might not have been the first to make the inventions covered by the issued patent or pending patent application that we license or own now or in the future;
- we, or our current or future licensors or collaborators, might not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our owned or licensed intellectual property rights;
- it is possible that our current or future pending owned or licensed patent applications will not lead to issued patents;
- issued patents that we hold rights to may be held invalid or unenforceable, including as a result of legal challenges by our competitors or other third parties;
- our competitors or other third parties might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;

- we may not develop additional proprietary technologies that are patentable;
- the patents of others may harm our business; and
- we may choose not to file a patent in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property.

Should any of these events occur, they could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

### **Risks Related to Our Common Stock and CVRs**

***Dr. Soon-Shiong, our Executive Chairman, Global Chief Scientific and Medical Officer and our principal stockholder, has significant interests in other companies which may conflict with our interests.***

Our Executive Chairman, Global Chief Scientific and Medical Officer and our principal stockholder, Dr. Soon-Shiong, is the founder of NantWorks. The various NantWorks companies are currently exploring opportunities in the immunotherapy, oncology, infectious disease and inflammatory disease fields. In particular, we have agreements with a number of related parties that provide services, technology and equipment for use in their efforts to develop their product pipelines. Dr. Soon-Shiong holds a controlling interest, either directly or indirectly, in these entities. Consequently, Dr. Soon-Shiong's interests may not be aligned with our other stockholders and he may from time to time be incentivized to take certain actions that benefit his other interests and that our other stockholders do not view as being in their interest as investors in our company. In addition, other companies affiliated with Dr. Soon-Shiong may compete with us for business opportunities or, in the future, develop products that are competitive with ours (including products in other therapeutic fields which we may target in the future). Moreover, even if they do not directly relate to us, actions taken by Dr. Soon-Shiong and the companies with which he is involved could impact us.

We are also pursuing supply arrangements for various investigational agents controlled by affiliates to be used in their clinical trials. If Dr. Soon-Shiong were to cease his affiliation with us or NantWorks, these entities may be unwilling to continue these relationships with us on commercially reasonable terms, or at all, and as a result may impede our ability to control the supply chain for our combination therapies. These collaboration agreements do not typically specify how sales will be apportioned between the parties upon successful commercialization of the product. As a result, we cannot guarantee that we will receive a percentage of the revenues that is at least proportional to the costs that we will incur in commercializing the product candidate.

We have entered into shared services agreements with NantWorks, pursuant to which NantWorks and its affiliates provide corporate, general and administrative and other support services to us. If Dr. Soon-Shiong was to cease his affiliation with us or with NantWorks, we may be unable to establish or maintain this relationship with NantWorks on a commercially reasonable basis, if at all. As a result, we could experience a lack of business continuity due to loss of historical and institutional knowledge and a lack of familiarity of new employees and/or new service providers with business processes, operating requirements, policies and procedures, and we may incur additional costs as new employees and/or service providers gain necessary experience. In addition, the loss of the services of NantWorks might significantly delay or prevent the development of our product candidates or achievement of other business objectives by diverting management's attention to transition matters and identification of suitable replacements, if any, and could have a material adverse effect on our business and results of operations.

***Dr. Soon-Shiong, through his voting control of the company, has the ability to control actions that require stockholder approval.***

Dr. Soon-Shiong, through his direct and indirect ownership of the company's common stock, has voting control of the company. As of March 31, 2023, Dr. Soon-Shiong and his affiliates own approximately 74.2% of the company's common stock outstanding.

As of March 31, 2023, the company has a \$300.0 million promissory note with an entity affiliated with Dr. Soon-Shiong that is due and payable on December 31, 2023. In the event of a default on the loan (as defined in the promissory note), including if the company does not repay the loan at maturity, the company has the right, at its sole option, to convert the outstanding principal amount and accrued and unpaid interest due under this note into shares of the company's common stock at price of \$5.67 per share.

Additionally, the March 31, 2023 \$30.0 million promissory note and accrued interest may be converted in whole at the option of the noteholder following the Conversion Price Date, which is the trading day prior to the opening of the next open trading window, as determined by the company's board of directors in accordance with the company's Insider Trading Policy. The conversion price is equal to the greater of (i) the NASDAQ Official Closing Price and (ii) the consolidated closing bid price of the company's common stock on the Conversion Price Date. There is no floor on the conversion price for this convertible note, therefore, as of March 31, 2023 we cannot determine the total number of shares issuable upon conversion that may occur in the future.

Furthermore, entities affiliated with Dr. Soon-Shiong hold fixed-rate promissory notes representing \$264.9 million in indebtedness (including principal and accrued and unpaid interest) as of March 31, 2023. The terms of these fixed-rate promissory notes were amended and restated to include a conversion feature that gives each lender, at its sole option, at any time (other than when the lender is in receipt of a written notice of prepayment from the borrower), the right to convert the entire outstanding principal amount and accrued and unpaid interest due under each note at the time of conversion into shares of the company's common stock at a price of \$5.67 per share. Upon receipt of a written notice of prepayment from the borrower, the lender has the right, at its option, to convert the outstanding principal amount to be prepaid and the accrued and unpaid interest thereon (as specified in the notice of prepayment) into shares of the company's common stock at a price of \$5.67 per share.

An affiliate of Dr. Soon-Shiong holds a warrant to purchase 1,638,000 shares of the company's common stock that will become exercisable if certain performance conditions are satisfied. Dr. Soon-Shiong and his related party also hold approximately \$139.8 million in the aggregate of CVRs issued to the former stockholders of Altor in connection with the 2017 acquisition of Altor. If the underlying conditions for payment are met, the CVRs become payable in cash or shares of the company's common stock or any combination as the holder elects. Dr. Soon-Shiong and his related party have both irrevocably agreed to receive shares of the company's common stock in satisfaction of their CVRs.

Dr. Soon-Shiong also has a total of 1,626,064 stock options outstanding as of March 31, 2023, of which 1,159,398 are exercisable and 466,666 are unvested and unexercisable.

Dr. Soon-Shiong is in a position to control the outcome of corporate actions that require, or may be accomplished by, stockholder approval, including amending the bylaws of the company, the election or removal of directors and transactions involving a change of control. Dr. Soon-Shiong's controlling ownership could limit the ability of the remaining stockholders of the company to influence corporate matters, and the interests of Dr. Soon-Shiong may not coincide with the company's interests or the interests of its remaining stockholders.

In addition, pursuant to the Nominating Agreement between us and Cambridge Equities, LP (Cambridge), an entity that Dr. Soon-Shiong controls, Cambridge has the ability to designate one director to be nominated for election to the Board of Directors for as long as Cambridge continues to hold at least 20% of the issued and outstanding shares of our common stock. Dr. Soon-Shiong was selected by Cambridge to hold this board seat. Dr. Soon-Shiong and his affiliates will therefore have significant influence over management and significant control over matters requiring stockholder approval, including the annual election of directors and significant corporate transactions, such as a merger or other sale of our company or its assets, for the foreseeable future. This control will limit stockholders' ability to influence corporate matters and, as a result, we may take actions that our stockholders do not view as beneficial. As a result, the market price of our common stock could be adversely affected.

***The market price of our common stock has been and may continue to be volatile, and investors may have difficulty selling their shares.***

Although our common stock is listed on the NASDAQ Global Select Market, the market for our shares has demonstrated varying levels of trading activity. You may not be able to sell your shares quickly or at the market price if trading in shares of our common stock is not active. Further, an inactive market may also impair our ability to raise capital by selling shares of our common stock and may impair our ability to enter into strategic partnerships or acquire companies or products by using our shares of common stock as consideration.

The stock market in general and the market for biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. The market price of our common stock has been and may continue to be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control, including:

- the commencement, enrollment or results of the planned clinical trials of our product candidates or any future clinical trials we may conduct, or changes in the development status of our product candidates;
- any delay in our regulatory filings for our product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority's review of such filings, including without limitation the FDA's issuance of a "refusal to file" letter or a request for additional information;
- adverse results or delays in clinical trials;
- our decision to initiate a clinical trial, not to initiate a clinical trial or to terminate an existing clinical trial;
- adverse regulatory decisions, including failure to receive regulatory approval of our product candidates;
- changes in laws or regulations applicable to our products, including but not limited to clinical trial requirements for approvals;
- our failure to commercialize our product candidates;
- additions or departures of key scientific or management personnel;
- unanticipated serious safety concerns related to the use of our product candidates;
- announcements by us or our competitors of significant contracts, acquisitions, strategic partnerships, joint ventures or capital commitments;
- our ability to effectively manage our growth;
- variations in our quarterly operating results;
- our liquidity position and the amount and nature of any debt we may incur;
- announcements that our revenue or income are below or that costs or losses are greater than analysts' expectations;
- publication of research reports about us or our industry, or immunotherapy in particular, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- changes in the market valuations of similar companies;
- sales of large blocks of our common stock;
- fluctuations in stock market prices and volumes;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- significant lawsuits, including patent or stockholder litigation;
- the perception of our clinical trial results by retail investors, which investors may be subject to the influence of information provided by third party investor websites and independent authors distributing information on the internet;

- general economic slowdowns;
- government-imposed lockdowns, supply chain disruptions, and adverse economic effects from the ongoing COVID-19 pandemic, in the U.S. and abroad;
- geopolitical tensions and war, including the war in Ukraine;
- coordinated actions by independent third-party actors to affect the price of certain stocks, coordinated via the Internet and otherwise; and
- other factors described in this “*Risk Factors*” section.

In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of a company’s securities. This type of litigation could result in substantial costs and a diversion of management’s attention and resources, which would harm our business, operating results or financial condition.

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

Sales of a substantial number of shares of our common stock in the public market could occur at any time. If our stockholders sell, or the market perceives that our stockholders intend to sell substantial amounts of our common stock in the public market, including shares obtained from the exercise of our warrants, the market price of our common stock could decline significantly. In addition, our Executive Chairman and Global Chief Scientific and Medical Officer, Dr. Soon-Shiong, and his affiliates currently own approximately 74.2% of our outstanding shares of common stock as of March 31, 2023. Sales of stock by Dr. Soon-Shiong and his affiliates could have an adverse effect on the trading price of our common stock.

Certain holders of our common stock are entitled to certain rights with respect to the registration of their shares under the Securities Act. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares held by our affiliates as defined in Rule 144 under the Securities Act. Any sales of securities by these stockholders could have an adverse effect on the market price of our common stock.

In addition, we expect that additional capital may be needed in the future to continue our planned operations, including conducting clinical trials, commercialization efforts, expanded research and development activities and costs associated with operating as a public company. To raise capital, we may sell common stock, convertible securities or other equity securities (including warrants) in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities (including warrants), new investors could gain rights, preferences and privileges senior to the holders of our common stock. The issuance of additional shares of common stock or warrants to purchase common stock, perception that such issuances may occur, or exercise of outstanding warrants or other equity securities will have a material dilutive impact on existing stockholders and could have a material negative effect on the market price of our common stock.

***We have incurred and will continue to incur costs as a result of operating as a public company and our management has been and will be required to devote substantial time to compliance initiatives and corporate governance practices, including maintaining an effective system of internal control over financial reporting.***

As a public company listed in the U.S., we have incurred and will continue to incur significant additional legal, accounting and other expenses as a result of operating as a public company. In addition, changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002 (Sarbanes Oxley) and regulations implemented by the SEC and NASDAQ, may increase legal and financial compliance costs and make some activities more time consuming. These laws, regulations and standards are subject to varying interpretations and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. We intend to invest resources to create a larger finance function with additional personnel to comply with evolving laws, regulations and standards, and this investment will result in increased general and administrative expenses and a diversion of management’s time and attention from revenue-generating activities to compliance activities. If, notwithstanding our efforts to comply with new laws, regulations and standards, we fail to comply, regulatory authorities may initiate legal proceedings against us, and our business may be harmed.

As a public company in the U.S., we are required, pursuant to Section 404 of Sarbanes-Oxley (Section 404) to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. The controls and other procedures are designed to ensure that information required to be disclosed by us in the reports that we file with the SEC is disclosed accurately and is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms.

In the normal course of business our controls and procedures may become inadequate because of changes in conditions or the degree of compliance with these policies or procedures may deteriorate and material weaknesses in our internal control over financial reporting may be discovered. We may err in the design or operation of our controls, and all internal control systems, no matter how well designed and operated, can provide only reasonable assurance that the objectives of the control system are met. Because there are inherent limitations in all control systems, there can be no absolute assurance that all control issues have been or will be detected. If we are unable, or are perceived as unable, to produce reliable financial reports due to internal control deficiencies, investors could lose confidence in our reported financial information and operating results, which could result in a negative market reaction.

To fully comply with Section 404, we will need to retain additional employees to supplement our current finance staff, and we may not be able to do so in a timely manner, or at all. In addition, in the process of evaluating our internal control over financial reporting, we expect that certain of our internal control practices will need to be updated to comply with the requirements of Section 404 and the regulations promulgated thereunder, and we may not be able to do so on a timely basis, or at all. In the event that we are not able to demonstrate compliance with Section 404 in a timely manner, or are unable to produce timely or accurate financial statements, we may be subject to sanctions or investigations by regulatory authorities, such as the SEC or NASDAQ, and investors may lose confidence in our operating results and the price of our common stock could decline. Furthermore, if we are unable to certify that our internal control over financial reporting is effective and in compliance with Section 404, we may be subject to sanctions or investigations by regulatory authorities, such as the SEC or stock exchanges, and investors could lose confidence in the accuracy and completeness of our financial reports, which could hurt our business, the price of our common stock and our ability to access the capital markets.

Operating as a public company makes it more expensive for us to obtain directors' and officers' liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified persons to serve on the Board of Directors, on committees of the Board of Directors, or as members of senior management.

***If a restatement of our consolidated financial statements were to occur, our stockholders' confidence in the company's financial reporting in the future may be affected, which could in turn have a material adverse effect on our business and stock price.***

If any 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. In addition, if we are unable to successfully remediate any future 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.

***We have not paid cash dividends in the past and do not expect to pay dividends in the future. Any return on investment may be limited to the value of our common stock.***

We have never paid cash dividends on our common stock and do not anticipate paying cash dividends for the foreseeable future. The payment of dividends on our common stock will depend on earnings, financial condition and other business and economic factors affecting us at such time as the Board of Directors may consider relevant. If we do not pay dividends, our common stock may be less valuable because a return on your investment will only occur if our stock price appreciates.

***Because we are relying on the exemptions from corporate governance requirements as a result of being a “controlled company” within the meaning of the NASDAQ listing standards, you do not have the same protections afforded to stockholders of companies that are subject to such requirements.***

Our Executive Chairman and Global Chief Scientific and Medical Officer, Dr. Soon-Shiong, and entities affiliated with him, control a majority of our common stock. As a result, we are a “controlled company” within the meaning of the NASDAQ listing standards. Under these rules, a company of which more than 50% of the voting power is held by an individual, a group or another company is a “controlled company” and may elect not to comply with certain NASDAQ corporate governance requirements, including (1) the requirement that a majority of the Board of Directors consist of independent directors, and (2) the requirement that we have a Nominating and Corporate Governance Committee that is composed entirely of independent directors with a written charter addressing the committee’s purpose and responsibilities. Accordingly, you do not have the same protections afforded to stockholders of companies that are subject to all of the NASDAQ corporate governance requirements. However, our Board of Directors is currently comprised of a majority of independent directors and we currently have a Nominating and Corporate Governance Committee and the majority of the members of such committee are independent directors.

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

The trading market for our common stock and the value of our warrants will depend on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. There can be no assurance that analysts will cover us or provide favorable coverage. If one or more of the analysts who cover us downgrade our stock or change their opinion of our stock, our share price would likely decline. If one or more of these analysts’ cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

***Holders of our CVRs that are payable contingent upon us achieving certain milestones may not receive any further consideration.***

In connection with our 2017 acquisition of Altor, we issued CVRs under which we agreed to pay the prior stockholders of Altor approximately \$304.0 million of contingent consideration upon the successful regulatory approval of a BLA by the FDA, or foreign equivalent, for N-803 by December 31, 2022, and approximately \$304.0 million of contingent consideration upon calendar-year worldwide sales of N-803 exceeding \$1.0 billion prior to December 31, 2026.

With respect to the regulatory milestone CVR agreement, in May 2022 we announced the submission of a BLA to the FDA for our product candidate, Anktiva (N-803) in combination with BCG for the treatment of patients with BCG-unresponsive NMIBC with CIS with or without Ta or T1 disease. In July 2022 we announced that the FDA had accepted our BLA for review and set a target PDUFA action date of May 23, 2023. On May 9, 2023, the FDA delivered a complete response letter to us regarding the BLA, as described in greater detail in Part I, Item 2 “*Management’s Discussion and Analysis—Subsequent Events.*” It is unclear when the FDA will approve our BLA, if at all. The FDA did not approve our BLA on or before December 31, 2022, and therefore the regulatory milestone was not met, and the regulatory milestone CVR agreement terminated in accordance with its terms. With respect to the sales milestone CVR agreement, N-803 is not currently approved for commercial sale, and there can be no assurance that such sales milestone will be achieved. Accordingly, holders of our CVRs that are payable contingent upon us achieving the aforementioned milestones may not receive any further consideration.

***We are not subject to the provisions of Section 203 of the Delaware General Corporation Law (DGCL), which could negatively affect your investment.***

We elected in our amended and restated certificate of incorporation to not be subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A “business combination” includes a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder. An “interested stockholder” is a person who, together with affiliates and associates, owns (or, in certain cases, within three years prior, did own) 15% or more of the corporation’s voting stock. Our decision not to be subject to Section 203 will allow, for example, our Executive Chairman and Global Chief Scientific and Medical Officer (who, with members of his immediate family and entities affiliated with him, currently own, in the aggregate, approximately 74.2% of our common stock as of March 31, 2023) to transfer shares in excess of 15% of our voting stock to a third-party free of the restrictions imposed by Section 203. This may make us more vulnerable to takeovers that are completed without the approval of our Board of Directors and/or without giving us the ability to prohibit or delay such takeovers as effectively.

***Some provisions of our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders, and may prevent attempts by our stockholders to replace or remove our current management.***

Provisions in our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders. These provisions include:

- a requirement that special meetings of stockholders be called only by the board of directors, president or chief executive officer;
- advance notice requirements for stockholder proposals and nominations for election to the board of directors; and
- the authority of the board of directors to issue preferred stock on terms determined by the board of directors without stockholder approval and which preferred stock may include rights superior to the rights of the holders of common stock.

These anti-takeover provisions and other provisions in our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws could make it more difficult for stockholders or potential acquirers to obtain control of our Board of Directors or initiate actions that are opposed by the then-current Board of Directors and could also delay or impede a merger, tender offer or proxy contest involving our company. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing or cause us to take other corporate actions you desire. Any delay or prevention of a change of control transaction or changes in our Board of Directors could cause the market price of our common stock to decline.



***Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.***

Our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law. In addition, as permitted by Section 145 of the DGCL, our Amended and Restated Bylaws and our indemnification agreements that we have entered into with our directors and officers provide that:

- We will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful.
- We may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law.
- We are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification.
- We are not obligated pursuant to our Amended and Restated Bylaws to indemnify a person with respect to proceedings initiated by that person against us or our other indemnitees except with respect to proceedings authorized by our Board of Directors or brought to enforce a right to indemnification.
- The rights conferred in our Amended and Restated Bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons.
- We may not retroactively amend our bylaw provisions to reduce our indemnification obligations to directors, officers, employees and agents.

To the extent that a claim for indemnification is brought by any of our directors or officers, it would reduce the amount of funds available for use in our business.

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

**(a) *Recent Sales of Unregistered Securities***

None.

**(b) *Issuer Purchases of Equity Securities***

None.

**ITEM 3. DEFAULTS UPON SENIOR SECURITIES.**

None.

**ITEM 4. MINE SAFETY DISCLOSURES.**

Not applicable.

**ITEM 5. OTHER INFORMATION.**

None.

**ITEM 6. EXHIBITS.**

The documents listed below are incorporated by reference or are filed or furnished with this Quarterly Report, in each case as indicated therein (numbered in accordance with Item 601 of Regulation S-K).

<b>Exhibit Number</b>	<b>Description of Exhibit</b>
3.1	<a href="#">Amended and Restated Certificate of Incorporation of ImmunityBio, Inc. (incorporated by reference to Exhibit 3.1 to the company's Current Report on Form 8-K filed with the SEC on August 4, 2015).</a>
3.2	<a href="#">Certificate of Amendment of Amended and Restated Certificate of Incorporation of ImmunityBio, Inc. dated March 9, 2021 (incorporated by reference to Exhibit 3.1 to the company's Current Report on Form 8-K filed with the SEC on March 10, 2021).</a>
3.3	<a href="#">Certificate of Amendment of Amended and Restated Certificate of Incorporation of ImmunityBio, Inc. dated February 1, 2022 (incorporated by reference to Exhibit 3.3 to the company's POSASR filed with the SEC on March 1, 2022).</a>
3.4	<a href="#">Amended and Restated Bylaws of ImmunityBio, Inc. effective as of March 10, 2021 (incorporated by reference to Exhibit 3.2 to the company's Quarterly Report on Form 10-Q filed with SEC on August 12, 2021).</a>
4.1	<a href="#">Form of Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.1 to the company's Current Report on Form 8-K filed with the SEC on February 15, 2023).</a>
10.1	<a href="#">Securities Purchase Agreement dated as of February 15, 2023 (incorporated by reference to Exhibit 10.1 to the company's Current Report on Form 8-K filed with the SEC on February 15, 2023).</a>
10.2	<a href="#">Convertible Promissory Note by and between ImmunityBio, Inc. and Nant Capital, LLC dated as of March 31, 2023 (incorporated by reference to Exhibit 10.1 to the company's Current Report on Form 8-K filed with the SEC on March 31, 2023).</a>
31.1*	<a href="#">Rule 13a-14(a)/15(d)-14(a) Certification of Principal Executive Officer.</a>
31.2*	<a href="#">Rule 13a-14(a)/15(d)-14(a) Certification of Principal Financial Officer.</a>
32.1**	<a href="#">Section 1350 Certification of Principal Executive Officer.</a>
32.2**	<a href="#">Section 1350 Certification of Principal Financial Officer.</a>
101.INS	Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document).
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

\* Filed herewith.

\*\* The certifications attached as Exhibits 32.1 and 32.2 that accompany this Quarterly Report on Form 10-Q are deemed furnished and not filed with the SEC and are not to be incorporated by reference into any filing of ImmunityBio, Inc. under the Securities Act or the Exchange Act, whether made before or after the date of this Quarterly Report, irrespective of any general incorporation language contained in such filing.

**SIGNATURES**

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

**IMMUNITYBIO, INC.**

*Registrant*

Date: May 11, 2023

By: /s/ Richard Adcock

Richard Adcock  
Chief Executive Officer  
*(Principal Executive Officer)*

Date: May 11, 2023

By: /s/ David C. Sachs

David C. Sachs  
Chief Financial Officer  
*(Principal Financial Officer)*

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER  
PURSUANT TO  
EXCHANGE ACT RULES 13a-14(a)/15d-14(a),  
AS ADOPTED PURSUANT TO SECTION 302 OF  
THE SARBANES-OXLEY ACT OF 2002**

I, Richard Adcock, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of ImmunityBio, 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 Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter 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: May 11, 2023

By: /s/ Richard Adcock  
Richard Adcock  
Chief Executive Officer and President  
(Principal Executive Officer)

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER  
PURSUANT TO  
EXCHANGE ACT RULES 13a-14(a)/15d-14(a),  
AS ADOPTED PURSUANT TO SECTION 302 OF  
THE SARBANES-OXLEY ACT OF 2002**

I, David C. Sachs, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of ImmunityBio, 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 Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter 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: May 11, 2023

By: /s/ David C. Sachs  
David C. Sachs  
Chief Financial Officer  
(Principal Financial Officer)

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

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Richard Adcock, the Chief Executive Officer of ImmunityBio, Inc. (the "Company"), hereby certify, that, to my knowledge:

- i. the Quarterly Report of the Company on Form 10-Q for the quarter ended March 31, 2023 (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- ii. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 11, 2023

By: /s/ Richard Adcock

Richard Adcock  
Chief Executive Officer and President  
(*Principal Executive Officer*)

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

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, David C. Sachs, the Chief Financial Officer of ImmunityBio, Inc. (the "Company"), hereby certify, that, to my knowledge:

- i. the Quarterly Report of the Company on Form 10-Q for the quarter ended March 31, 2023 (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- ii. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 11, 2023

By: /s/ David C. Sachs

David C. Sachs

Chief Financial Officer

*(Principal Financial Officer)*