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

FORM 10-Q

(Mark One)

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

FOR THE QUARTERLY PERIOD ENDED 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 0-29889

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

Delaware	**94-3248524**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
611 Gateway Boulevard, Suite 900, South San Francisco, CA (Address of principal executive offices)	**94080** (Zip Code)

(650) 624-1100
(Registrant's telephone number, including area code)

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

Title of each class:	**Trading Symbol**	**Name of each exchange on which registered:**
Common Stock, par value $0.001 per share	RIGL	The Nasdaq Stock Market LLC

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

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

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

Large accelerated filer ☐	Accelerated filer ☒
Non-accelerated filer ☐	Smaller reporting company ☐
Emerging Growth Company ☐	

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

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

As of April 27, 2023, there were 173,666,805 shares of the registrant's Common Stock outstanding.

RIGEL PHARMACEUTICALS, INC.
QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTERLY PERIOD ENDED MARCH 31, 2023

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

RIGEL PHARMACEUTICALS, INC.
CONDENSED BALANCE SHEETS
(In thousands)

	As of	
	March 31, 2023 (unaudited)	December 31, 2022 (1)
Assets		
Current assets:		
Cash and cash equivalents	$ 40,285	$ 24,459
Short-term investments	18,377	33,747
Accounts receivable, net	29,366	40,320
Inventories	11,077	9,118
Prepaid and other current assets	7,867	8,259
Total current assets	106,972	115,903
Property and equipment, net	294	857
Intangible asset, net	14,681	14,949
Operating lease right-of-use assets	1,123	1,930
Other assets	542	640
Total assets	$ 123,612	$ 134,279
Liabilities and stockholders' deficit		
Current liabilities:		
Accounts payable	$ 6,295	$ 22,508
Accrued compensation	5,661	8,866
Accrued research and development	6,940	7,708
Revenue reserves and refund liability	14,088	12,145
Other accrued liabilities	5,096	6,485
Lease liabilities, current portion	449	1,133
Deferred revenue	1,369	1,369
Other long-term liabilities, current portion	5,620	4,997
Total current liabilities	45,518	65,211
Long-term portion of lease liabilities	802	972
Loans payable, net of discount	59,484	39,448
Other long-term liabilities	42,065	42,264
Total liabilities	147,869	147,895
Commitments		
Stockholders' deficit:		
Preferred stock	—	—
Common stock	174	174
Additional paid-in capital	1,371,591	1,368,822
Accumulated other comprehensive loss	(27)	(153)
Accumulated deficit	(1,395,995)	(1,382,459)
Total stockholders' deficit	(24,257)	(13,616)
Total liabilities and stockholders' deficit	$ 123,612	$ 134,279

(1) The balance sheet as of December 31, 2022 has been derived from the audited financial statements included in Rigel's Annual Report on Form 10-K for the year ended December 31, 2022 filed with the Securities and Exchange Commission (SEC) on March 7, 2023.

See Accompanying Notes to Condensed Financial Statements

RIGEL PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF OPERATIONS
(In thousands, except per share amounts)
(unaudited)

	Three Months Ended March 31,	
	2023	2022
Revenues:		
Product sales, net	$ 23,745	$ 16,197
Contract revenues from collaborations	2,325	538
Total revenues	26,070	16,735
Costs and expenses:		
Cost of product sales	977	121
Research and development	10,089	15,474
Selling, general and administrative	27,729	27,401
Total costs and expenses	38,795	42,996
Loss from operations	(12,725)	(26,261)
Interest income	393	21
Interest expense	(1,204)	(1,205)
Net loss	$ (13,536)	$ (27,445)
Net loss per share, basic and diluted	$ (0.08)	$ (0.16)
Weighted average shares used in computing net loss per share, basic and diluted	173,568	171,774

See Accompanying Notes to Condensed Financial Statements

RIGEL PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF COMPREHENSIVE LOSS
(In thousands)
(unaudited)

	Three Months Ended March 31,	
	2023	2022
Net loss	$ (13,536)	$ (27,445)
Other comprehensive gain (loss):		
Net unrealized gain (loss) on short-term investments	126	(314)
Comprehensive loss	$ (13,410)	$ (27,759)

See Accompanying Notes to Condensed Financial Statements

RIGEL PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF STOCKHOLDERS' (DEFICIT) EQUITY
(In thousands, except share amounts)
(unaudited)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount				
Balance as of January 1, 2023	173,398,645	$ 174	$ 1,368,822	$ (153)	$ (1,382,459)	$ (13,616)
Net loss	—	—	—	—	(13,536)	(13,536)
Net change in unrealized gain on short-term investments	—	—	—	126	—	126
Issuance of common stock upon exercise of options	952	—	1	—	—	1
Issuance of common stock upon vesting of restricted stock units (RSUs)	266,256	—	—	—	—	—
Stock-based compensation expense	—	—	2,768	—	—	2,768
Balance as of March 31, 2023	173,665,853	174	$ 1,371,591	$ (27)	$ (1,395,995)	$ (24,257)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance as of January 1, 2022	171,602,226	$ 172	$ 1,354,190	$ (102)	$ (1,323,886)	$ 30,374
Net loss	—	—	—	—	(27,445)	(27,445)
Net unrealized loss on short-term investments	—	—	—	(314)	—	(314)
Issuance of common stock upon exercise of options	420,521	—	940	—	—	940
Issuance of common stock upon vesting of RSUs	22,500	—	—	—	—	—
Stock-based compensation expense	—	—	3,243	—	—	3,243
Balance as of March 31, 2022	172,045,247	$ 172	$ 1,358,373	$ (416)	$ (1,351,331)	$ 6,798

See Accompanying Notes to Condensed Financial Statements

RIGEL PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF CASH FLOWS
(In thousands)
(unaudited)

	Three Months Ended March 31,	
	2023	2022
Operating activities		
Net loss	$ (13,536)	(27,445)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	2,758	3,207
Loss on sale and disposal of fixed assets	347	—
Depreciation and amortization	357	237
Non-cash interest expense	—	682
Net amortization and accretion of discount on short-term investments and term loan	(68)	28
Changes in assets and liabilities:		
Accounts receivable, net	10,954	232
Inventories	(1,949)	(112)
Prepaid and other current assets	392	(2,003)
Other assets	98	510
Right-of-use assets	807	2,171
Accounts payable	(1,213)	850
Accrued compensation	(3,205)	(4,062)
Accrued research and development	(768)	(892)
Revenue reserves and refund liability	1,943	1,540
Other accrued liabilities	(1,389)	2,274
Lease liability	(854)	(2,355)
Deferred revenue	—	(499)
Other current and long-term liabilities	1,252	—
Net cash used in operating activities	(4,074)	(25,637)
Investing activities		
Purchases of short-term investments	—	(6,997)
Maturities of short-term investments	15,650	29,850
Purchases of intangible asset	(15,000)	—
Proceeds from sale of property and equipment	127	—
Purchases of property and equipment	—	(224)
Net cash provided by investing activities	777	22,629
Financing activities		
Cost share payments to a collaboration partner	(828)	(2,118)
Net proceeds from issuances of common stock upon exercise of options	1	940
Net proceeds from term loan financing	19,950	9,975
Net cash provided by financing activities	19,123	8,797
Net increase in cash and cash equivalents	15,826	5,789
Cash and cash equivalents at beginning of period	24,459	18,890
Cash and cash equivalents at end of period	$ 40,285	$ 24,679
Supplemental disclosure of cash flow information		
Interest paid	$ 1,011	$ 393

See Accompanying Notes to Condensed Financial Statements

Rigel Pharmaceuticals, Inc.
Notes to Condensed Financial Statements
(unaudited)

In this report, "Rigel," "we," "us" and "our" refer to Rigel Pharmaceuticals, Inc.

1. Organization and Summary of Significant Accounting Policies

Description of Business

We are a biotechnology company dedicated to discovering, developing and providing novel therapies that significantly improve the lives of patients with hematologic disorders and cancer. Our pioneering research focuses on signaling pathways that are critical to disease mechanisms.

Our first product approved by the US Food and Drug Administration (FDA) is TAVALISSE® (fostamatinib disodium hexahydrate) tablets, the only approved oral spleen tyrosine kinase (SYK) inhibitor, for the treatment of adult patients with chronic immune thrombocytopenia (ITP) who have had an insufficient response to a previous treatment. The product is also commercially available in Europe and the United Kingdom (UK) (as TAVLESSE), and in Canada, Israel and Japan (as TAVALISSE) for the treatment of chronic ITP in adult patients.

Our second FDA approved product is REZLIDHIA® (olutasidenib) capsules for the treatment of adult patients with relapsed or refractory (R/R) acute myeloid leukemia (AML) with a susceptible isocitrate dehydrogenase-1 (IDH1) mutation as detected by an FDA-approved test. We began our commercialization of REZLIDHIA in December 2022. We in-licensed olutasidenib from Forma Therapeutics, Inc. (Forma), with exclusive, worldwide rights for its development, manufacturing and commercialization.

We conducted a Phase 3 clinical trial evaluating fostamatinib for the treatment of warm autoimmune hemolytic anemia (wAIHA) and announced that we did not file a supplemental New Drug Application (sNDA) for this indication considering the top-line data results and guidance received from the FDA. We announced the completion of the FOCUS Phase 3 clinical trial of fostamatinib for the treatment of hospitalized high-risk patients with COVID-19. Fostamatinib is currently being studied in a National Institute of Health (NIH)/National Heart, Lung, and Blood Institute (NHLBI) sponsored Accelerating COVID-19 Therapeutic Inventions and Vaccines Phase 2/3 trial (ACTIV-4 Host Tissue Trial) for the treatment of COVID-19 in hospitalized patients.

Our other clinical programs include our interleukin receptor-associated kinase (IRAK) inhibitor program, and a receptor-interacting serine/threonine-protein kinase (RIPK1) inhibitor program in clinical development with partner Eli Lilly and Company (Lilly). In addition, we have product candidates in clinical development with partners BerGenBio ASA (BerGenBio) and Daiichi Sankyo (Daiichi).

Basis of Presentation

Our accompanying unaudited condensed financial statements have been prepared in accordance with United States generally accepted accounting principles (US GAAP), for interim financial information and pursuant to the instructions to Form 10-Q and Article 10 of Regulation S-X of the Securities Act of 1933, as amended (Securities Act). Accordingly, they do not include all the information and notes required by US GAAP for complete financial statements. These unaudited condensed financial statements include only normal and recurring adjustments that we believe are necessary to fairly state our financial position and the results of our operations and cash flows. Interim-period results are not necessarily indicative of results of operations or cash flows for a full-year or any subsequent interim period. The balance sheet as of December 31, 2022 has been derived from audited financial statements at that date but does not include all disclosures required by US GAAP for complete financial statements. Because certain disclosures required by US GAAP for complete financial statements are not included herein, these interim unaudited condensed financial statements and the notes accompanying them should be read in conjunction with our audited financial statements and the notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 7, 2023.

Use of Estimates

The preparation of financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results could differ from these estimates.

Significant Accounting Policies

Our significant accounting policies are described in "Note 1 – Description of Business and Summary of Significant Accounting Policies" to our "Notes to Financial Statements" contained in "Part II, Item 8, Financial Statements and Supplementary Data" of our Annual Report on Form 10-K for the year ended December 31, 2022. There have been no material changes to these accounting policies.

Liquidity

As of March 31, 2023, we had approximately $58.7 million in cash, cash equivalents and short-term investments. Since inception, we have financed our operations primarily through sales of equity securities, debt financing, contract payments under our collaboration agreements and from product sales.

Based on our current operating plan, we believe that our existing cash, cash equivalents, and short-term investments will be sufficient to fund our expenses and capital expenditure requirements for at least the next 12 months from the date of issuance of this Form 10-Q.

Recently Issued Accounting Standards

Recently issued accounting guidance is either not applicable or did not have, or is not expected to have, a material impact to us.

2. Net Loss Per Share

Basic net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during the period. Diluted net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during the period and the number of additional shares of common stock that would have been outstanding if potentially dilutive securities had been issued. Potentially dilutive securities include stock options, RSUs and shares issuable under our Employee Stock Purchase Plan (Purchase Plan). The dilutive effect of these potentially dilutive securities is reflected in diluted earnings per share using the treasury stock method. Under the treasury stock method, an increase in the fair market value of our common stock can result in a greater dilutive effect from potentially dilutive securities.

The potential shares of common stock that were excluded from the computation of diluted net loss per share for the periods presented because including them would have been antidilutive are as follows (in thousands):

	Three Months Ended March 31,	
	2023	2022
Outstanding stock options	35,909	32,639
RSUs	1,988	1,206
Purchase Plan	345	312
Total	38,242	34,157

3. Revenues

Revenues disaggregated by category were as follows (in thousands):

	Three Months Ended March 31,	
	2023	2022
Product sales:		
Gross product sales	$ 33,198	$ 22,618
Discounts and allowances	(9,453)	(6,421)
Total product sales, net	23,745	16,197
Revenues from collaborations:		
License revenues	—	208
Royalty, delivery of drug supplies and others	2,325	330
Total revenues from collaborations	2,325	538
Government contract	—	—
Total revenues	$ 26,070	$ 16,735

Revenue from product sales are related to sales of our commercial products, TAVALISSE and REZLIDHIA, to our specialty distributors. For detailed discussions of our revenues from collaboration and government contract, see “Note 4 – Sponsored Research and License Agreements and Government Contract”.

Our net product sales include gross product sales, net of chargebacks, discounts and fees, government and other rebates and returns. The following tables summarize the activities in chargebacks, discounts and fees, government and other rebates and returns that were accounted for within revenue reserves and refund liability, for each of the periods presented (in thousands):

	Chargebacks, Discounts and Fees	Government and Other Rebates	Returns	Total
Balance as of January 1, 2023	$ 6,213	$ 2,636	$ 3,296	$ 12,145
Provision related to current period sales	7,231	1,795	197	9,223
Credit or payments made during the period	(5,777)	(1,422)	(81)	(7,280)
Balance as of March 31, 2023	$ 7,667	$ 3,009	$ 3,412	$ 14,088

	Chargebacks, Discounts and Fees	Government and Other Rebates	Returns	Total
Balance as of January 1, 2022	$ 3,404	$ 2,494	$ 2,017	$ 7,915
Provision related to current period sales	4,345	1,397	378	6,120
Credit or payments made during the period	(3,322)	(1,227)	(31)	(4,580)
Balance as of March 31, 2022	$ 4,427	$ 2,664	$ 2,364	$ 9,455

Of the $9.5 million discounts and allowances from gross product sales for the three months ended March 31, 2023, $9.2 million was accounted for as additions to revenue reserves and refund liability and $0.3 million as reductions in accounts receivable (as it relates to allowance for prompt pay discount) and prepaid and other current assets (as it relates to certain chargebacks and other fees that were prepaid) in the condensed balance sheet.

Of the $6.4 million discounts and allowances from gross product sales for the three months ended March 31, 2022, $6.1 million was accounted for as additions to revenue reserves and refund liability and $0.3 million as reductions in accounts receivable (as it relates to allowance for prompt pay discount) and prepaid and other current assets (as it relates to certain chargebacks and other fess that were prepaid) in the condensed balance sheet.

The following table summarizes the percentages of revenues from each of our customers who individually accounted for 10% or more of the total net product sales and revenues from collaborations:

	Three Months Ended March 31,	
	2023	2022
McKesson Specialty Care Distribution Corporation	45%	38%
Cardinal Healthcare	24%	28%
ASD Healthcare and Oncology Supply	22%	31%

4. Sponsored Research and License Agreements and Government Contract

Sponsored Research and License Agreements

We conduct research and development programs independently and in connection with our corporate collaborators. As of March 31, 2023, we are a party to collaboration agreements with Lilly to develop and commercialize R552, a RIPK1 inhibitor, for the treatment of non-central nervous system (non-CNS) diseases and collaboration aimed at developing additional RIPK1 inhibitors for the treatment of central nervous system (CNS) diseases; with Grifols S.A. (Grifols) to commercialize fostamatinib for human diseases in all indications, including chronic ITP and autoimmune hemolytic anemia (AIHA), in Grifols territory which includes Europe, the UK, Turkey, the Middle East, North Africa and Russia (including Commonwealth of Independent States); with Kissei Pharmaceutical Co., Ltd. (Kissei) to develop and commercialize fostamatinib in Kissei territory which includes Japan, China, Taiwan and the Republic of Korea; with Medison Pharma Trading AG (Medison Canada) and Medison Pharma Ltd. (Medison Israel and, together with Medison Canada, Medison) to commercialize fostamatinib in all indications, including chronic ITP and AIHA, in Medison territory which includes Canada and Israel; and with Knight Therapeutics International SA (Knight) to commercialize fostamatinib in all indications, including chronic ITP and AIHA, in Knight territory which includes Latin America, consisting of Mexico, Central and South America, and the Caribbean (Knight territory).

Further, we are also a party to collaboration agreements, but do not have ongoing performance obligations with BerGenBio for the development and commercialization of AXL receptor tyrosine kinase (AXL) inhibitors in oncology, and with Daiichi to pursue research related to murine double minute 2 (MDM2) inhibitors, a novel class of drug targets called ligases.

Under the above existing agreements that we entered into in the ordinary course of business, we received or may be entitled to receive upfront cash payments, payments contingent upon specified events achieved by such partners and royalties on any net sales of products sold by such partners under the agreements. As of March 31, 2023, total future contingent payments to us under all of above existing agreements, excluding terminated agreements, could exceed $1.3 billion if all potential product candidates achieved all of the payment triggering events under all of our current agreements. Of this amount, $279.5 million relates to the achievement of development events, $263.1 million relates to the achievement of regulatory events and $796.0 million relates to the achievement of certain commercial events. This estimated future contingent amount does not include any estimated royalties that could be due to us if the partners successfully commercialize any of the licensed products. Future events that may trigger payments to us under the agreements are based solely on our partners' future efforts and achievements of specified development, regulatory and/or commercial events.

Global Exclusive License Agreement with Lilly

We have a global exclusive license agreement and strategic collaboration with Lilly (Lilly Agreement) entered in February 2021, which became effective on March 27, 2021, upon clearance under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, to develop and commercialize R552 for the treatment of non-CNS diseases. In addition, the collaboration is aimed at developing additional RIPK1 inhibitors for the treatment of CNS diseases. Pursuant to the terms of the license agreement, we granted to Lilly exclusive rights to develop and commercialize R552 and related RIPK1 inhibitors in all indications worldwide. The parties' collaboration is governed through a joint governance committee and appropriate subcommittees.

We are responsible for 20% of development costs for R552 in the US, Europe, and Japan, up to a specified cap. Lilly is responsible for funding the remainder of all development activities for R552 and other non-CNS disease development candidates. We have the right to opt-out of co-funding the R552 development activities in the US, Europe and Japan at two different specified times. If we exercise our first opt-out right (no later than September 30, 2023), under the Lilly Agreement, we are required to fund our share of the R552 development activities in the US, Europe, and Japan up to a maximum funding commitment of $65.0 million through April 1, 2024. If we decide not to exercise our opt-out rights, we will be required to share in global development costs of up to certain amounts at a specified cap, as provided for in the Lilly Agreement.

We are responsible for performing and funding initial discovery and identification of CNS disease development candidates. Following candidate selection, Lilly will be responsible for performing and funding all future development and commercialization of the CNS disease development candidates.

Under the terms of the Lilly Agreement, we were entitled to receive a non-refundable and non-creditable upfront cash payment amounting to $125.0 million, which we received in April 2021. We are also entitled to additional milestone payments for non-CNS disease products consisting of up to $330.0 million in milestone payments upon the achievement of specified development, regulatory and commercial milestones, and up to $100.0 million in sales milestone payments on a product-by-product basis. In addition, depending on the extent of our co-funding of R552 development activities, we would be entitled to receive tiered royalty payments on net sales of non-CNS disease products at percentages ranging from the mid-single digits to high-teens, subject to certain standard reductions and offsets. We are also eligible to receive milestone payments for CNS disease products consisting of up to $255.0 million in milestone payments upon the achievement of specified development, regulatory and commercial milestones, and up to $150.0 million in sales milestone payments on a product-by-product basis. We would be entitled to receive tiered royalty payments on net sales of CNS disease products up to low-double digits, subject to certain standard reductions and offsets.

We accounted for this agreement under ASC 606 and identified the following distinct performance obligations at inception of the agreement: (a) granting of the license rights over the non-CNS penetrant intellectual property (IP), and (b) granting of the license rights over the CNS penetrant IP which will be delivered to Lilly upon completion of the additional research and development efforts specified in the agreement. We concluded each of these performance obligations is distinct. We based our assessment on the assumption that Lilly can benefit from each of the licenses on its own by developing and commercializing the underlying product using its own resources.

Under the Lilly Agreement, we are required to share 20% of the development costs for R552 in the US, Europe and Japan up to a specified cap. Given our rights to opt-out from the development of R552, we believe at the minimum, we have a commitment to fund the development costs up to $65.0 million as discussed above. We considered this commitment to fund the development costs as a significant financing component of the contract, which we accounted for as a reduction of the upfront fee to derive the transaction price. This financing component was recorded as a liability at its net present value of approximately $57.9 million using a 6.4% discount rate. Interest expense is accreted on such liability over the expected commitment period, adjusted for timing of expected cost share payments. No interest was accreted during the three months ended March 31, 2023 and $0.7 million of interest was accreted during the three months ended March 31, 2022. Through March 31, 2023, Lilly billed us $15.9 million for our share of development costs under this agreement, and the amount was fully paid as of March 31, 2023. As of March 31, 2023 and December 31, 2022, the outstanding financing liability to Lilly was $45.4 million and $46.2 million, respectively, and included within other long-term liabilities, current portion, and other long-term liabilities in the condensed balance sheet.

We allocated the net transaction price of $67.1 million to each performance obligation based on our best estimate of its relative standalone selling price using the adjusted market assessment approach. We concluded that the license rights over the non-CNS penetrant IP represents functional IP that is not expected to change over time, and we have no ongoing or undelivered obligations relative to such IP that Lilly will benefit from the use of such IP on the delivery date. As such, the transaction price allocated to the non-CNS penetrant IP of $60.4 million was recognized as revenue during the first quarter of 2021 upon delivery of the non-CNS penetrant IP to Lilly in March 2021. For the delivery of license rights over the CNS penetrant IP, we were obligated to perform additional research and development efforts before Lilly can accept the license. The allocated transaction price to the CNS penetrant IP of $6.7 million was recognized as revenue from the effective date of the Lilly Agreement through the eventual acceptance by Lilly using the input method. In June 2022, Lilly provided notice of continuance pursuant to the terms of the Lilly Agreement, whereby

Lilly elected its option to lead the identification and selection of CNS penetrant lead candidate. As such, we recognized the remaining outstanding deferred revenue related to delivery of the CNS penetrant IP in the second quarter of 2022. For the three months ended March 31, 2022, we recognized $0.2 million of revenue associated with the delivery of CNS penetrant IP. No such revenue was recognized in the three months ended March 31, 2023.

The remaining future variable consideration related to future milestone payments as discussed above were fully constrained because we cannot conclude that it is probable that a significant reversal of the amount of cumulative revenue recognized will not occur, given the inherent uncertainty of success with these future milestones. For sales-based milestones and royalties, we determined that the license is the predominant item to which the royalties or sales-based milestones relate. Accordingly, we will recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). We will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

Grifols License Agreement

We have an exclusive commercialization license agreement with Grifols entered in January 2019 with exclusive rights to commercialize fostamatinib for human diseases, including chronic ITP and AIHA, and non-exclusive rights to develop fostamatinib in Grifols territory. Under the agreement, we received an upfront payment of $30.0 million, with the potential for $297.5 million in total regulatory and commercial milestones. We are also entitled to receive stepped double-digit royalty payments based on tiered net sales which may reach 30% of net sales. The agreement also required us to continue to conduct our long-term open-label extension study on patients with ITP through European Medicines Agency (EMA) approval of ITP in Europe or until the study ends as well as conduct the Phase 3 trial of fostamatinib in AIHA.

In January 2020, the European Commission (EC) granted a centralized Marketing Authorization (MA) for fostamatinib valid throughout the European Union (EU) and in the UK after the departure of the UK from the EU for the treatment of chronic ITP in adult patients who are refractory to other treatments. With this approval, in February 2020, we received $20.0 million non-refundable payment, composed of a $17.5 million payment due upon Marketing Authorization Application (MAA) approval by the EMA of fostamatinib for the first indication and a $2.5 million creditable advance royalty payment, based on the terms of our collaboration agreement with Grifols. The above milestone payment was allocated to the distinct performance obligations in the collaboration agreement with Grifols.

We accounted for this agreement under ASC 606 and identified the following distinct performance obligations at inception of the agreement: (a) granting of the license, (b) performance of research and regulatory services related to our long-term open-label extension study on patients with ITP, and (c) performance of research services related to our Phase 3 study in AIHA. We allocated the transaction price to the distinct performance obligations in our collaboration agreement based on our best estimate of the relative standalone selling price, and recognized the corresponding revenue in the periods we satisfied the performance obligations. During the three months ended March 31, 2023 and 2022, no revenue and $0.3 million of revenue, respectively, was recognized associated with the remaining performance obligation to perform research services.

The remaining variable consideration related to future regulatory and commercial milestones were fully constrained because we cannot conclude that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur, given the inherent uncertainty of success with these future milestones. We are recognizing revenues related to the research and regulatory services throughout the term of the respective clinical programs using the input method. For sales-based milestones and royalties, we determined that the license is the predominant item to which the royalties or sales-based milestones relate. Accordingly, we will recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). We will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

We entered into a Commercial Supply Agreement with Grifols in October 2020 to supply and sell our drug product priced at a certain markup specified in the agreement, in quantities Grifols order from us pursuant to and in accordance with the agreement. Prior to the Commercial Supply Agreement, we had a Drug Product Purchase Agreement with Grifols entered in December 2019. For the three months ended March 31, 2023, we recognized revenue of $1.6 million related to delivery of drug supply to Grifols for its commercialization. No such revenue was recognized during the three months ended March 31, 2022.

We began recognizing royalty revenue from Grifols beginning in the third quarter of 2022. For the three months ended March 31, 2023, we recognized $0.7 million of royalty revenue from Grifols, and such amount was included within contract revenues from collaboration. No such revenue was recognized for the three months ended March 31, 2022.

Kissei License Agreement

We have an exclusive license and supply agreement with Kissei entered in October 2018, to develop and commercialize fostamatinib in all current and potential indications in Kissei's territory. Kissei is responsible for performing and funding all development activities for fostamatinib in the above-mentioned territories. We received an upfront cash payment of $33.0 million, with the potential for up to an additional $147.0 million in development, regulatory and commercial milestone payments, and will receive mid- to upper twenty percent, tiered, escalated net sales-based payments for the supply of fostamatinib. Under the agreement, we granted Kissei the license rights to fostamatinib in Kissei's territory and are obligated to supply Kissei with drug product for use in clinical trials and pre-commercialization activities. We are also responsible for the manufacture and supply of fostamatinib for all future development and commercialization activities under the agreement.

We accounted for this agreement under ASC 606 and identified the following distinct performance obligations at inception of the agreement: (a) granting of the license, (b) supply of fostamatinib for clinical use and (c) material right associated with discounted fostamatinib that is supplied for use other than clinical or commercial. In addition, we will provide commercial product supply if the product is approved in the licensed territory. We concluded that each of these performance obligations is distinct. We determined that the upfront fee of $33.0 million represented the transaction price and was allocated to the performance obligations based on our best estimate of the relative standalone selling price and recognized the corresponding revenue in the period we satisfied the performance obligations. As of March 31, 2023 and December 31, 2022, the remaining deferred revenue was related to the material right associated with discounted fostamatinib supply which amounted to $1.4 million.

In April 2022, Kissei announced that an NDA was submitted to Japan's Pharmaceuticals and Medical Devices Agency (PMDA) for fostamatinib in chronic ITP. With this milestone event, we received $5.0 million non-refundable and non-creditable payment from Kissei pursuant to the terms of our collaboration agreement, and such amount was recognized as revenue in the second quarter of 2022. In December 2022, Kissei announced that Japan's PMDA approved the NDA for fostamatinib in chronic ITP. With this milestone event, we were entitled to receive $20.0 million non-refundable and non-creditable payment from Kissei pursuant to the terms of our collaboration agreement, which we recognized as revenue in the fourth quarter of 2022. The amount was subsequently collected in January 2023.

The remaining variable consideration related to future development and regulatory milestones was fully constrained because we cannot conclude that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur, given the inherent uncertainty of success with these future milestones. For sales-based milestones and tiered, escalated net sales-based payments for the supply of fostamatinib, we determined that the license is the predominant item to which the sales-based milestones relate to. Accordingly, we will recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the allocated costs for the tiered, escalated net sales-based payments has been satisfied (or partially satisfied). We will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

Medison Commercial and License Agreements

We have two exclusive commercial and license agreements with Medison entered in October 2019 for the commercialization of fostamatinib for chronic ITP in Medison territory, pursuant to which, we received a $5.0 million upfront payment with respect to the agreement in Canada. We accounted for this agreement under ASC 606 and identified the following combined performance obligations at inception of the agreement: (a) granting of the license and (b) obtaining regulatory approval in Canada of fostamatinib in ITP. We determined that the non-refundable upfront fee of $5.0 million represented the transaction price. However, under the agreement, we have the option to buy back all rights to the product in Canada within six months from obtaining regulatory approval for the treatment of AIHA in Canada. The buyback option precludes us from transferring control of the license to Medison under ASC 606. We believed that the buyback provision, if exercised, will require us to repurchase the license at an amount equal to or more than the upfront $5.0 million. As such, this arrangement was accounted for as a financing arrangement. Interest expense was accreted on such liability over the expected buyback period. We also billed Medison for the delivery of fostamatinib supplies for clinical use which we previously deferred and included within the outstanding financing liability considering the buy-back provision.

The decision to exercise the buyback option is dependent of many factors including management's cost and benefit assessments and the success of obtaining regulatory approval for the treatment of AIHA in Canada. In June 2022, we reported the top-line results from our Phase 3 trial of fostamatinib in wAIHA which showed that the trial did not demonstrate statistical significance in the primary efficacy endpoint in the overall study population. We also announced in early October 2022 that we will not file an sNDA for wAIHA indication considering the top-line data results and the guidance received from the FDA. With these developments, we assessed our options path forward, including our buyback option right with regards to the Medison license agreement. Based on management's assessment, the likelihood of exercising the buy-back option right was remote. As such, during the fourth quarter of 2022, we relieved the outstanding financing liability to Medison amounting to $5.7 million and recognized such amount as collaboration revenue in accordance with ASC 606. There was no outstanding financing liability to Medison as of March 31, 2023 and December 31, 2022.

Knight Commercial License and Supply Agreement

We have a commercial license and supply agreements with Knight entered in May 2022 for the commercialization of fostamatinib for approved indications in Knight territory. Pursuant to such commercial license agreement, we received a $2.0 million one-time, non-refundable, and non-creditable upfront payment, with potential for up to an additional $20.0 million in regulatory and sales-based commercial milestone payments, and will receive twenty- to mid-thirty percent, tiered, escalated net-sales based royalty payments for products sold in the Knight territory. We accounted for this agreement under ASC 606 and identified that the upfront payment was a consideration for granting Knight the license to commercialize fostamatinib for approved indication in the Knight territory, and no further material deliverables associated to such upfront payment. As such, we recognized the upfront payment as revenue during the second quarter of 2022. Variable consideration related to future regulatory milestones was fully constrained because we cannot conclude that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur, given the inherent uncertainty of success with these future milestones. For sales-based milestones and royalties, we determined that the license is the predominant item to which the royalties or sales-based milestones relate to. Accordingly, we will recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all the royalty has been allocated has been satisfied (or partially satisfied). We will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur. We are also responsible for the exclusive manufacture and supply of fostamatinib for all future development and commercialization activities under agreement.

Government Contract - US Department of Defense's JPEO-CBRND

In January 2021, we were awarded up to $16.5 million by the US Department of Defense to support our ongoing Phase 3 clinical trial to evaluate the safety and efficacy of fostamatinib for the treatment of hospitalized high-risk patients with COVID-19. The amount of award we will receive from the US Department of Defense is subject to submission of proper documentation as evidence of completion of certain clinical trial events or milestones as specified in the agreement, and approval by the US Department of Defense that such events or milestones have been met. We record government contract revenue in the statement of operations in the period when it is probable that we will receive

the award, which is when we comply with the conditions associated with the award and obtain approval from the US Department of Defense that such conditions have been met. No revenue was recognized during the three months ended March 31, 2023 and 2022. Through March 31, 2023, we received $15.0 million of the awards which we recognized as revenue in the respective periods, with remaining $1.5 million awards available, subject to us meeting certain clinical trial events or milestones and approval by the US Department of Defense as specified in the agreement.

License and Transition Services Agreement with Forma

We have a license and transition services agreement with Forma entered in July 2022, for an exclusive license to develop, manufacture and commercialize olutasidenib, Forma's proprietary inhibitor of mutated IDH1 (mIDH1), for any uses worldwide, including for the treatment of AML and other malignancies. Forma became a wholly owned subsidiary of Novo Nordisk A/S following the closing of the acquisition of Forma in October 2022. Pursuant to the terms of the license and transition services agreement, we paid Forma an upfront fee of $2.0 million, with the potential to pay up to $67.5 million of additional payments upon achievement of specified development and regulatory milestones and up to $165.5 million of additional payments upon achievement of certain commercial milestones. In addition, subject to the terms and conditions of the license and transition services agreement, Forma would be entitled to tiered royalty payments on net sales of licensed products at percentages ranging from low-teens to mid-thirties, as well as certain portion of our sublicensing revenue, subject to certain standard reductions and offsets.

The transaction was accounted for as an acquisition of asset under ASC 730, *Research and Development*. In accordance with the guidance, in a transaction accounted for as an asset acquisition, any acquired IPR&D that does not have alternative future use is charged to expense at the acquisition date. At the acquisition date, the acquired license asset was accounted for as IPR&D, and we do not anticipate any economic benefit to be derived from such acquired licensed asset other than the primary indications. As such, we accounted for the upfront fee of $2.0 million paid to Forma as IPR&D and recorded such cost within research and development expenses in the condensed statements of operations in the third quarter of 2022.

Under the accounting guidance, we account for contingent cash payments when it is probable that a liability has been incurred and the amount can be reasonably estimated. We account for milestone payment obligations incurred at development stage and prior to a regulatory approval of an indication associated with the acquired licensed asset as research and development expenses when the event requiring payment of the milestone occurs. Milestone payment obligations incurred upon and after a regulatory approval of an indication associated with the acquired licensed asset, and at the commercial stage, are recorded as intangible asset when the event requiring payment of the milestones occurs. The amount recorded as intangible asset is amortized over the estimated useful life of the acquired licensed asset. Royalty payments related to the acquired licensed asset is recorded as cost of sales when incurred. During the fourth quarter of 2022 prior to the approval of FDA on December 1, 2022, a near-term regulatory milestone was met which entitled Forma to receive a $2.5 million milestone payment. Since such milestone payment obligation was incurred prior to a regulatory approval of an indication associated with the acquired licensed asset, we recorded such amount as research and development expense in the fourth quarter of 2022. On December 1, 2022, the FDA approved REZLIDHIA capsules for the treatment of adult patients with R/R AML with susceptible IDH1 mutations as detected by an FDA-approved test. Following the FDA approval, we launched REZLIDHIA and made first shipments of the product to our customers in December 2022. With this FDA approval and first commercial sale of the product, Forma were entitled to receive a total of $15.0 million milestone payments. Since such milestone payment obligations were incurred upon and after regulatory approval of the product, we recorded such amount as intangible asset on our condensed balance sheet in the fourth quarter of 2022. The $15.0 million milestone payment obligation was outstanding as of December 31, 2022 and included within accounts payable in our condensed balance sheet. Such amount was paid in the first quarter of 2023.

During the three months ended March 31, 2023, we recognized $0.3 million of amortization of intangible asset and $0.2 million of royalty expense related to Forma as discussed above. Such costs were included within cost of sales in our condensed statements of operations. No such expenses were recognized during the three months ended March 31, 2022.

5. Stock-Based Compensation

Stock-based compensation for the periods presented was as follows (in thousands):

	Three Months Ended March 31,	
	2023	2022
Selling, general and administrative	$ 1,735	$ 2,739
Research and development	1,023	468
Total stock-based compensation expense	$ 2,758	$ 3,207

Stock-based compensation expense included within research and development in the three months ended March 31, 2023 include an incremental charge of approximately $0.5 million from stock option modifications related to the acceleration of vesting and extension of exercise period of vested stock option grants made to a former officer whose employment ended in March 2023. Stock-based compensation expense included within selling, general and administrative in the three months ended March 31, 2022 include an incremental charge of approximately $0.8 million from stock option modifications to extend the exercise period of the stock option grants made to our two former Board of Directors whose terms expired in May 2022.

During the three months ended March 31, 2023, we granted stock options to purchase 2,620,000 shares of common stock with weighted-average grant-date fair value of $1.42 per share, and 952 stock options were exercised. As of March 31, 2023, there were 35,909,499 stock options outstanding, of which, 2,870,000 are outstanding performance-based stock options wherein the achievement of the corresponding corporate-based milestones were not considered probable as of March 31, 2023. Accordingly, none of the $5.3 million grant date fair value for these awards has been recognized as stock-based compensation expense as of March 31, 2023.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model. The following table summarizes the weighted-average assumptions relating to options granted pursuant to our Equity Incentive Plans (2018 Equity Incentive Plan and Inducement Plan) for the periods presented:

	Three Months Ended March 31,	
	2023	2022
Risk-free interest rate	3.7 %	1.7 %
Expected term (in years)	7.0	6.4
Dividend yield	0.0 %	0.0 %
Expected volatility	82.8 %	70.0 %

During the three months ended March 31, 2023, we granted 1,207,600 RSUs with a grant-date weighted-average fair value of $1.87 per share, and 266,256 RSUs were released. The RSUs granted generally vest over 4 years. As of March 31, 2023, there were 1,988,498 RSUs outstanding.

As of March 31, 2023, there was approximately $16.5 million of unrecognized stock-based compensation cost which is expected to be recognized over a remaining weighted-average period of 2.65 years, related to time-based stock options, performance-based stock options wherein achievement of the corresponding corporate-based milestones was considered as probable, and RSUs.

As of March 31, 2023, there were 7,646,459 shares of common stock available for future grant under our Equity Incentive Plans.

Employee Stock Purchase Plan

Our Purchase Plan provides for a 24-month offering period comprises four six-month purchase periods with a look-back option. A look-back option is a provision in our Purchase Plan under which eligible employees can purchase shares of our common stock at a price per share equal to the lesser of 85% of the fair market value on the first day of the offering period or 85% of the fair market value on the purchase date. Our Purchase Plan also includes a feature that provides for a new offering period to begin when the fair market value of our common stock on any purchase date during an offering period falls below the fair market value of our common stock on the first day of such offering period. This feature is called a "reset." Participants are automatically enrolled in the new offering period.

Our previous twenty-four-month offering period under our Purchase Plan ended on June 30, 2022, and a new twenty-four-month offering period started on July 1, 2022. The fair value of awards under our Purchase Plan is estimated on the date of our new offering period using the Black-Scholes option pricing model, which is being amortized over the requisite service periods. As of March 31, 2023, unrecognized stock-based compensation cost related to our Purchase Plan amounted to $0.7 million, which is expected to be recognized over the remaining weighted average period of 0.74 years.

As of March 31, 2023, there were 3,437,633 shares reserved for future issuance under the Purchase Plan.

6. Inventories

Inventories for the periods presented consist of the following (in thousands):

	As of	
	March 31, 2023	December 31, 2022
Raw materials	$ 6,910	$ 4,555
Work in process	2,048	2,659
Finished goods	2,119	1,904
Total	$ 11,077	$ 9,118

Inventories as of March 31, 2023 and December 31, 2022 include inventories acquired from Forma pursuant to the license and transition agreement. As of March 31, 2023 and December 31, 2022, we have $0.7 million and $0.8 million, respectively, in advance payments to the manufacturer of our raw materials, which was included within prepaid and other current assets in the condensed balance sheet.

7. Cash, Cash Equivalents and Short-Term Investments

Cash, cash equivalents and short-term investments for the periods presented consist of the following (in thousands):

	As of	
	March 31, 2023	December 31, 2022
Cash	$ 3,120	$ 6,264
Money market funds	17,174	4,155
US treasury bills	—	5,225
Government-sponsored enterprise securities	25,442	15,796
Corporate bonds and commercial paper	12,926	26,766
	$ 58,662	$ 58,206
Reported as:		
Cash and cash equivalents	$ 40,285	$ 24,459
Short-term investments	18,377	33,747
	$ 58,662	$ 58,206

Cash equivalents and short-term investments include the following securities with gross unrealized gains and losses (in thousands):

As of March 31, 2023	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Government-sponsored enterprise securities	$ 25,456	$ 5	$ (19)	$ 25,442
Corporate bonds and commercial paper	12,939	—	(13)	12,926
Total	$ 38,395	$ 5	$ (32)	$ 38,368

As of December 31, 2022	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
US treasury bills	$ 5,251	$ —	$ (26)	$ 5,225
Government-sponsored enterprise securities	15,882	1	(87)	15,796
Corporate bonds and commercial paper	26,807	—	(41)	26,766
Total	$ 47,940	$ 1	$ (154)	$ 47,787

We maintain a depository relationship with Silicon Valley Bank (SVB). On March 10, 2023, SVB was closed by the California Department of Financial Protection and Innovation, which appointed the Federal Deposit Insurance Corporation (FDIC) as receiver. On March 12, 2023, federal regulators announced that the FDIC would complete its resolution of SVB in a manner that fully protects all depositors. On March 27, 2023, First Citizens BancShares, Inc. (FCB) announced that it entered into an agreement with FDIC to purchase all of the asset and liabilities of SVB. Customers of SVB automatically become customers of FCB following the acquisition. To date and as of March 31, 2023, the amount of our cash held on deposit with SVB/FCB was not material with respect our total cash, cash equivalents and short-term investments. All of our cash deposits with SVB/FCB are accessible to us, and we do not anticipate any losses with respect to such funds.

As of March 31, 2023 and December 31, 2022, our cash equivalents and short-term investments had a weighted-average time to maturity of approximately 58 days and 89 days, respectively. Our short-term investments are classified as available-for-sale securities. Accordingly, we have classified certain securities as short-term investments on our condensed balance sheets as they are available for use in the current operations. As of March 31, 2023, we had no investments that had been in a continuous unrealized loss position for more than 12 months. As of March 31, 2023, a total of 16 individual securities had been in an unrealized loss position for 12 months or less, and the losses were determined to be temporary. No significant facts or circumstances have arisen to indicate that there has been any significant deterioration in the creditworthiness of the issuers of the securities held by us. Based on our review of these securities, including the assessment of the duration and severity of the unrealized losses, we have not recognized any credit losses on these securities as of March 31, 2023 and December 31, 2022.

The following table shows the fair value and gross unrealized losses of our investments in individual securities that are in an unrealized loss position, aggregated by investment category (in thousands):

As of March 31, 2023	Fair Value	Unrealized Losses
Government-sponsored enterprise securities	$ 9,942	$ (19)
Corporate bonds and commercial paper	7,929	(13)
Total	$ 17,871	$ (32)

8. Fair Value

The table below summarizes the fair value of our cash equivalents and short-term investments measured at fair value on a recurring basis, and are categorized based upon the lowest level of significant input to the valuations (in thousands):

	Assets at Fair Value as of March 31, 2023			
	Level 1	Level 2	Level 3	Total
Money market funds	$ 17,174	$ —	$ —	$ 17,174
Government-sponsored enterprise securities	—	25,442	—	25,442
Corporate bonds and commercial paper	—	12,926	—	12,926
Total	$ 17,174	$ 38,368	$ —	$ 55,542

	Assets at Fair Value as of December 31, 2022			
	Level 1	Level 2	Level 3	Total
Money market funds	$ 4,155	$ —	$ —	$ 4,155
US treasury bills	—	5,225	—	5,225
Government-sponsored enterprise securities	—	15,796	—	15,796
Corporate bonds and commercial paper	—	26,766	—	26,766
Total	$ 4,155	$ 47,787	$ —	$ 51,942

9. Debt

We have a Credit and Security Agreement (Credit Agreement) with MidCap Financial Trust (MidCap) entered on September 27, 2019 (Closing Date) and amended on March 29, 2021 (First Amendment), February 11, 2022 (Second Amendment) and July 27, 2022 (Third Amendment). The Credit Agreement provides for a $60.0 million term loan credit facility. At the Closing Date, $10.0 million was funded (Tranche 1), in May 2020, an additional $10.0 million was funded (Tranche 2), at the Second Amendment, an additional $10.0 million was funded (Tranche 3), at the Third Amendment, an additional $10.0 million was funded (Tranche 4), and on March 28, 2023, an additional $20.0 million was funded (Tranche 5). As of March 31, 2023, the outstanding principal balance of the loan was $60.0 million, and no remaining funds are available for draw under the term loan credit facility.

The First Amendment to the Credit Agreement entered in March 2021 extended the period through which Tranche 3 was available to us. The Second Amendment to the Credit Agreement entered in February 2022, among other things, amended the applicable funding conditions, applicable commitments and certain other terms relating to available credit facilities (Tranches 3 and 4), added additional term loan credit facility (Tranche 5), and revised certain terms related to the financial covenants.

Following the Third Amendment, the maturity date for the term loans is on September 1, 2026, and the interest-only period is through October 1, 2024. The interest rate applicable to the term loans under the amended Credit Agreement is the sum of one-month Secured Overnight Financing Rate (SOFR), plus an adjustment of 0.11448%, subject to 1.50% applicable floor, plus applicable margin of 5.65%. A final payment fee of 2.5% of principal is due at maturity date of the term loans. Prior to the Third Amendment, the outstanding principal balance of the loan bore interest at an annual rate of one-month London Interbank Offered Rate (LIBOR), or a comparable applicable index rate, plus applicable margin of 5.65%, subject to a LIBOR floor of 1.50% and is payable monthly in arrears.

We may make voluntary prepayments, in whole or in part, subject to certain prepayment premiums and additional interest payments. The Credit Agreement also contains certain provisions, such as event of default and change in control provisions, which, if triggered, would require us to make mandatory prepayments on the term loan, which are subject to certain prepayment premiums and additional interest payments. The obligations under the amended Credit Agreement are secured by a perfected security interest in all of our assets including our intellectual property.

Debt issuance costs are recorded as a direct deduction from the outstanding principal balance of the term loan. As of March 31, 2023 and December 31, 2022, the unamortized issuance costs and debt discounts amounted to $0.5 million and $0.6 million, respectively.

Interest expense, including amortization of the debt discount and accretion of the final fees related to the Credit Agreement for the three months ended March 31, 2023 and 2022 was $1.2 million and $0.5 million, respectively. Accrued interest of $0.9 million was included within other accrued liabilities in the condensed balance sheet as of March 31, 2023.

The following table presents the future minimum principal payments of the outstanding loan as of March 31, 2023 (in thousands):

Remainder of 2023	$	—
2024		7,500
2025		30,000
2026		22,500
Principal amount (Tranches 1, 2, 3 and 4)	$	60,000

The amended Credit Agreement contains certain covenants which, among others, require us to deliver financial reports at designated times of the year and maintain minimum unrestricted cash and trailing net revenues. As of March 31, 2023, we were not in violation of any covenants.

10. Leases

We have a sublease agreement with Atara Biotherapeutics, Inc. (Atara) entered in October 2022 to sublease an office space located in South San Francisco, California. Subject to the terms of the sublease agreement, the lease term commenced in November 2022 and shall expire in May 2025. This leased facility is currently held as our new headquarters following the expiration of our previously leased facility in January 2023. At lease measurement date in the fourth quarter of 2022, we recognized the operating lease right-of-use asset and lease liability of approximately $1.3 million. As of March 31, 2023, we recorded $0.2 million of lease incentives from our sublease with Atara, which we recorded as a reduction to operating lease right-of-use asset and lease liability until the lease ends and the asset is transferred. The weighted average remaining term of our leases as of March 31, 2023 was 2.17 years.

We had a lease agreement with Healthpeak Properties, Inc. (formerly known as HCP BTC, LLC), to occupy research and office space located in South San Francisco, California and a sublease agreement with an unrelated third-party to sublet a portion of the leased facility. Both leases expired in January 2023.

The components of our operating lease expense were as follows (in thousands):

	Three Months Ended March 31,	
	2023	2022
Fixed operating lease expense	$ 612	$ 1,340
Variable operating lease expense	72	266
Total operating lease expense	$ 684	$ 1,606

Supplemental information related to our operating lease were as follow (in thousands):

	Three Months Ended March 31,	
	2023	2022
Cash payments included in the measurement of operating lease liabilities	$ 996	$ 2,596

Supplemental information related to our operating sublease was as follow (in thousands):

	Three Months Ended March 31,	
	2023	2022
Fixed sublease expense	$ 365	$ 1,095
Variable sublease expense	77	244
Sublease income	(442)	(1,339)
Net	$ —	$ —

The following table presents the future lease payments as of March 31, 2023 (in thousands):

Remainder of 2023	$ 539
2024	739
2025	301
Total minimum payments required	$ 1,579

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

This discussion and analysis should be read in conjunction with our financial statements and the accompanying notes included in this report and the audited financial statements and accompanying notes included in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 7, 2023. Our financial results for the three months ended March 31, 2023 are not necessarily indicative of results that may occur in future interim periods or for the full fiscal year.

This Quarterly Report on Form 10-Q contains statements indicating expectations about future performance and other forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (Securities Act) and Section 21E of the Securities Exchange Act of 1934, as amended (Exchange Act), that involve risks and uncertainties. We usually use words such as "may," "will," "would," "should," "could," "expect," "plan," "anticipate," "might," "believe," "estimate," "predict," "intend," or the negative of these terms or similar expressions to identify these forward-looking statements. These statements appear throughout this Quarterly Report on Form 10-Q and are statements regarding our current expectations, beliefs or intent, primarily with respect to our operations and related industry developments. Examples of these statements include, but are not limited to: our expectations regarding the impact of the global COVID-19 pandemic; our business and scientific strategies; risks and uncertainties associated with the commercialization and marketing of our products in the US and outside the US; risks that the FDA, EMA or other regulatory authorities may make adverse decisions regarding our products; the progress of our and our collaborators' product development programs, including clinical testing, and the timing of results thereof; our corporate collaborations and revenues that may be received from our collaborations and the timing of those potential payments; our expectations with respect to regulatory submissions and approvals; our drug discovery technologies; our research and development expenses; protection of our intellectual property and our intention to vigorously enforce our intellectual property rights; sufficiency of our cash and capital resources and the need for additional capital; and our operations and legal risks. You should not place undue reliance on these forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including as a result of the risks and uncertainties discussed under the heading "Risk Factors" in Item 1A of Part II of this Quarterly Report on Form 10-Q. Any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events, except as required by applicable law. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Overview

We are a biotechnology company dedicated to discovering, developing and providing novel therapies that significantly improve the lives of patients with hematologic disorders and cancer. Our pioneering research focuses on signaling pathways that are critical to disease mechanisms.

Our first product approved by the FDA is TAVALISSE (fostamatinib disodium hexahydrate) tablets, the only approved oral SYK inhibitor, for the treatment of adult patients with chronic ITP who have had an insufficient response to a previous treatment. The product is also commercially available in Europe and UK (as TAVLESSE), and in Canada, Israel and Japan (as TAVALISSE) for the treatment of chronic ITP in adult patients.

Our second FDA approved product is REZLIDHIA (olutasidenib) capsules for the treatment of adult patients with R/R AML with a susceptible IDH1 mutation as detected by an FDA-approved test. We began our commercialization of REZLIDHIA in December 2022. We in-licensed olutasidenib from Forma with exclusive, worldwide rights for its development, manufacturing and commercialization.

We conducted a Phase 3 clinical trial evaluating fostamatinib for the treatment of wAIHA and announced that we did not file an sNDA for this indication considering the top-line data results and guidance received from the FDA. We announced the completion of the FOCUS Phase 3 clinical trial of fostamatinib for the treatment of hospitalized high-risk patients with COVID-19. Fostamatinib is currently being studied in an NIH/NHLBI sponsored Phase 2/3 trial (ACTIV-4 Host Tissue Trial) for the treatment of COVID-19 in hospitalized patients.

Business Updates

TAVALISSE IN ITP

For the three months ended March 31, 2023, net product sales of TAVALISSE were $22.3 million, a 38% increase compared to the same period in 2022. The increase in our net product sales was primarily driven by the increase in quantities sold as well as the increase in price per bottle of TAVALISSE. These increases were partially offset by the increase in revenue reserves mainly due to higher government and private party rebates. Our first quarter net sales are typically impacted by the first quarter reimbursement issues such as the resetting of co-pays and the Medicare donut hole.

REZLIDHIA in R/R AML with mIDHI

For the three months ended March 31, 2023, we recognized $1.5 million of net product sales of REZLIDHIA. We began the commercialization of REZLIDHIA in December 2022 following the FDA approval. On December 1, 2022, the FDA approved REZLIDHIA capsules for the treatment of adult patients with R/R AML with a susceptible IDH1 mutation as detected by an FDA-approved test.

We in-licensed olutasidenib from Forma with exclusive, worldwide rights for its development, manufacturing and commercialization. Pursuant to the license and transition services agreement with Forma entered in July 2022, Forma provided us an exclusive license to develop, manufacture and commercialize olutasidenib, Forma's proprietary inhibitor of mIDH1, for any uses worldwide, including for the treatment of AML and other malignancies. In accordance with the terms of the license and transition services agreement, we paid Forma an upfront fee of $2.0 million, with the potential to pay up to $67.5 million additional payments upon achievement of specified development and regulatory milestones and up to $165.5 million additional payments upon achievement of certain commercial milestones. In addition, subject to the terms and conditions of the license and transition services agreement, Forma would be entitled to tiered royalty payments on net sales of licensed products at percentages ranging from low-teens to mid-thirties, as well as certain portions of our sublicensing revenue, subject to certain standard reductions and offsets. During the year ended December 31, 2022, certain milestones were met which entitled Forma to receive a $17.5 million milestone payments. No new milestone was met during the three months ended March 31, 2023. For further discussions of the license and transition services agreement with Forma, see "Note 4 - Sponsored Research and License Agreements and Government Contract" to our "Notes to Condensed Financial Statements" contained in Part I, Item 1 of this Quarterly Report on Form 10-Q.

R289, an Oral IRAK1/4 Inhibitor for Hematology-Oncology, Autoimmune, and Inflammatory Diseases

We continue to advance the development of our IRAK1/4 program, completing the evaluation of a new pro-drug formulation of R835, R289, in single-ascending and multiple ascending dose studies with positive safety results in 2021. In January 2022, we received clearance from the FDA on our clinical trial design to explore R289 in low-risk myelodysplastic syndrome (MDS). The open-label, Phase 1b trial will determine the tolerability and preliminary efficacy of R289 in patients with low-risk MDS who are refractory or resistant to prior therapies. In December 2022, we announced that we dosed the first patient in our Phase 1b trial of R289. The Phase 1b trial of R289 is expected to enroll approximately 22 patients. The primary objective of the trial is safety, with secondary and exploratory objectives to assess preliminary efficacy and characterize the pharmacokinetic and pharmacodynamic profile of R289. The safety and efficacy data from this Phase 1b trial, along with the safety and pharmacokinetic/pharmacodynamic data from the completed first-in-human study in heathy volunteers, are intended to be used to determine the recommended Phase 2 dose for future clinical development of R289 targeting lower-risk MDS. To date, we completed enrollment of the first cohort of the trial and enrollment of the second cohort is underway.

Global Strategic Partnership with Lilly

Lilly is continuing to advance R552, with an initial Phase 2a trial in active rheumatoid arthritis. This initial Phase 2a trial in approximately 100 patients with moderately to severely active rheumatoid arthritis is anticipated to begin in the second quarter of 2023 and will involve global recruitment. RIPK1 is implicated in a broad range of key inflammatory cellular processes and plays a key role in Tumor Necrosis Factor signaling, especially in the induction of pro-inflammatory necroptosis. The program also includes RIPK1 compounds that cross the blood-brain barrier (CNS-

penetrants) to address neurodegenerative diseases such as Alzheimer's disease and Amyotrophic Lateral Sclerosis. The Phase 2a trial analysis is expected by the end of 2024.

Under the Lilly Agreement, we are responsible for 20% of the development costs for R552 in the US, Europe, and Japan, up to a specified cap. Lilly is responsible for funding the remainder of all development activities for R552 and other non-CNS disease development candidates. We have the right to opt-out of co-funding the R552 development activities in the US, Europe and Japan at two different specified times. If we exercise our first opt-out right (no later than September 30, 2023), we are required to fund our share of the R552 development activities in the US, Europe, and Japan up to a maximum funding commitment of $65.0 million through April 1, 2024. Through March 31, 2023, Lilly billed us $15.9 million of the funding development costs and the amounts were fully paid as of March 31, 2023. Under the Lilly Agreement, we were responsible for performing and funding initial discovery and identification of CNS disease development candidates, and following candidate selection, Lilly will be responsible for performing and funding all future development and commercialization of the CNS disease development candidates. In June 2022, Lilly provided notice of continuance pursuant to the terms of the Lilly Agreement, whereby Lilly elected its option to lead the identification and selection of CNS penetrant lead candidate.

Fostamatinib in Hospitalized COVID-19 patients

In November 2022, we announced the top-line results from the FOCUS Phase 3 clinical trial to evaluate the safety and efficacy of fostamatinib in hospitalized COVID-19 patients without respiratory failure that have certain high-risk prognostic factors with 280 patients. The trial had originally targeted a total of 308 patients; however, we determined the trial would be sufficiently powered with 280 patients to potentially provide a clinically meaningful result and determine the efficacy and safety of fostamatinib in hospitalized COVID-19 patients. The trial approached but did not meet statistical significance ($p=0.0603$) in the primary efficacy endpoint of the number of days on oxygen through Day 29. All prespecified secondary endpoints in the study numerically favored fostamatinib over placebo, including mortality, time to sustained recovery, change in ordinal scale assessment, and number of days in the ICU. We are evaluating the opportunity and discussing next steps with the FDA and in collaboration with our partner, the US Department of Defense.

The ACTIV-4 Host Tissue Trial, initiated and funded by NHLBI, is a randomized, placebo-controlled trial of therapies, including fostamatinib, targeting the host response to COVID-19 in hospitalized patients. The ACTIV-4 Host Tissue Trial is evaluating fostamatinib in a targeted population of approximately 600 hospitalized patients with COVID-19, 300 fostamatinib versus 300 placebo. An interim analysis of the trial was completed by the Data and Safety Monitoring Board with a recommendation for the trial to continue.

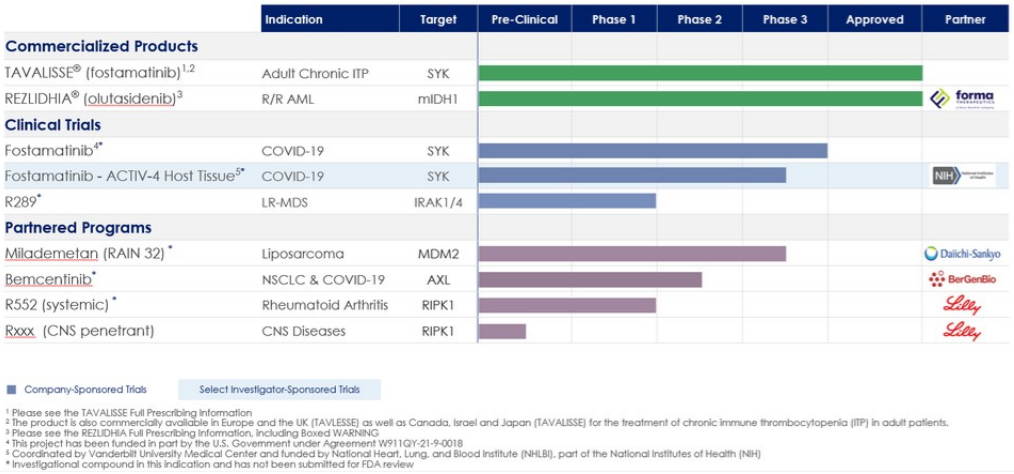
Update on Current and Potential Future Impact of COVID-19 on our Business

The COVID-19 pandemic has adversely impacted, and may continue to adversely impact, our business and operations. The degree to which the COVID-19 pandemic may affect our business and operations and financial condition in the future will depend on developments that are highly uncertain and beyond our knowledge or control. As such, we cannot ascertain the full extent of the future impacts it may have on our business. We continue to monitor the effects of the COVID-19 pandemic and continues to undertake safety measures to keep our staff, patients, investigators and stockholders safe.

See also "Part I, Item 1A, Risk Factors" of this Quarterly Report on Form 10-Q for additional information on risks and uncertainties related to the ongoing COVID-19 pandemic.

Our Product Portfolio

The following table summarizes our portfolio:



Commercial Products

TAVALISSE/Fostamatinib in ITP

Disease background. Chronic ITP affects an estimated 81,300 adult patients in the US. In patients with ITP, the immune system attacks and destroys the body's own blood platelets, which play an active role in blood clotting and healing. ITP patients can suffer extraordinary bruising, bleeding and fatigue as a result of low platelet counts. Current therapies for ITP include steroids, blood platelet production boosters that imitate thrombopoietin (TPO) and splenectomy.

Orally available fostamatinib program. Taken in tablet form, fostamatinib blocks the activation of SYK inside immune cells. ITP is typically characterized by the body producing antibodies that attach to healthy platelets in the blood stream. Immune cells recognize these antibodies and affix to them, which activates the SYK enzyme inside the immune cell, and triggers the destruction of the antibody and the attached platelet. When SYK is inhibited by fostamatinib, it interrupts this immune cell function and allows the platelets to escape destruction. The results of our Phase 2 clinical trial, in which fostamatinib was orally administered to 16 adults with chronic ITP, published in *Blood*, showed that fostamatinib significantly increased the platelet counts of certain ITP patients, including those who had failed other currently available agents.

Our Fostamatinib for Immune Thrombocytopenia (FIT) Phase 3 clinical program had a total of 150 ITP patients which were randomized into two identical multi-center, double-blind, placebo-controlled clinical trials. The patients were diagnosed with persistent or chronic ITP, and had blood platelet counts consistently below 30,000 per microliter of blood. Two-thirds of the subjects received fostamatinib orally at 100 mg twice daily (bid) and the other third received placebo on the same schedule. Subjects were expected to remain on treatment for up to 24 weeks. At week four of treatment, subjects who failed to meet certain platelet counts and met certain tolerability thresholds could have their dosage of fostamatinib (or corresponding placebo) increased to 150 mg bid. The primary efficacy endpoint of this program was a stable platelet response by week 24 with platelet counts at or above 50,000 per microliter of blood for at least four of the final six qualifying blood draws. In August 2016, we announced the results of the first FIT study, reporting that fostamatinib met the study's primary efficacy endpoint. The study showed that 18% of patients receiving fostamatinib achieved a stable platelet response compared to none receiving a placebo control. In October 2016, we announced the results of the second FIT study, reporting that the response rate (16% in the treatment group, versus 4% in the placebo group) was consistent with the first study, although the difference was not statistically significant. In the ITP

double-blind studies, the most commonly-reported adverse reactions occurring in at least 5% of patients treated with TAVALISSE were diarrhea, hypertension, nausea, dizziness, increased alanine aminotransferase, increased aspartate aminotransferase, respiratory infection, rash, abdominal pain, fatigue, chest pain, and neutropenia. Serious adverse drug reactions occurring in at least 1% of patients treated with TAVALISSE in the ITP double-blind studies were febrile neutropenia, diarrhea, pneumonia, and hypertensive crisis. A post-hoc analysis from our Phase 3 clinical program in adult patients with chronic ITP, highlighting the potential benefit of using TAVALISSE in earlier lines of therapy, was published in the British Journal of Haematology in July 2020.

TAVALISSE was approved by the FDA in April 2018 for the treatment of ITP in adult patients who have had an insufficient response to a previous treatment, and successfully launched in the US in May 2018. The FDA granted orphan drug designation for fostamatinib for the treatment of ITP in August 2015.

In January 2020, the EC granted our MAA in Europe for fostamatinib (TAVLESSE) for the treatment of chronic ITP in adult patients who are refractory to other treatments. In December 2022, Japan's PMDA approved the NDA for fostamatinib in chronic ITP.

Competitive landscape for TAVALISSE

Our industry is intensely competitive and subject to rapid and significant technological change. TAVALISSE is competing with other existing therapies. In addition, a number of companies are pursuing the development of pharmaceuticals that target the same diseases and conditions that we are targeting. For example, there are existing therapies and drug candidates in development for the treatment of ITP that may be alternative therapies to TAVALISSE.

Currently, corticosteroids remain the most common first line therapy for ITP, occasionally in conjunction with intravenous immunoglobulin (IVIg) or anti-Rh(D) to help further augment platelet count recovery, particularly in emergency situations. However, it has been estimated that frontline agents lead to durable remissions in only a small percentage of newly-diagnosed adults with ITP. Moreover, concerns with steroid-related side effects often restrict therapy to approximately four weeks. As such, many patients progress to persistent or chronic ITP, requiring other forms of therapeutic intervention. In long-term treatment of chronic ITP, patients are often cycled through several therapies over time in order to maintain a sufficient response to the disease.

Other approaches to treat ITP are varied in their mechanism of action, and there is no consensus about the sequence of their use. Options include splenectomy, thrombopoietin receptor agonists (TPO-RAs) and various immunosuppressants (such as rituximab). The response rate criteria of the above-mentioned options vary, precluding a comparison of response rates for individual therapies.

Even with the above treatment options, a significant number of patients remain severely thrombocytopenic for long durations and are subject to risk of spontaneous or trauma-induced hemorrhage. The addition of fostamatinib to the currently available treatment options could be beneficial because it has a different mechanism of action than any of the therapies that are currently available. Fostamatinib is a potent and relatively selective SYK inhibitor, and its inhibition of Fc receptors and B-cell receptors of signaling pathways make it a potentially broad immunomodulatory agent.

Other products in the US that are approved by the FDA to increase platelet production through binding to TPO receptors on megakaryocyte precursors include PROMACTA® (Novartis International AG (Novartis)), Nplate® (Amgen, Inc.) and DOPTELET® (Swedish Orphan Biovitrum AB). In the longer term, we may eventually face competition from potential manufacturers of generic versions of our marketed products, including the proposed generic version of TAVALISSE that is the subject of an Abbreviated New Drug Application (ANDA) submitted to the FDA by Annora Pharma Private Limited (Annora), which, if approved and allowed to enter the market, it could result in significant decreases in the revenue derived from sale of TAVALISSE and thereby materially harm our business and financial condition.

Commercial activities, including sales and marketing

Our marketing and sales efforts are focused on hematologists and hematologist-oncologists in the US who manage chronic adult ITP patients. We have a fully integrated commercial team consisting of sales, marketing, market access, and commercial operations functions. Our sales team promotes our products in the US using customary

pharmaceutical company practices, and we concentrate our efforts on hematologists and hematologist-oncologists. Our products are sold initially through third-party wholesale distribution and specialty pharmacy channels and group purchasing organizations before being ultimately prescribed to patients. To facilitate our commercial activities in the US, we also enter into arrangements with various third parties, including advertising agencies, market research firms and other sales-support-related services as needed. We believe that our commercial team and distribution practices are adequate to ensure that our marketing efforts reach relevant customers and deliver our products to patients in a timely and compliant fashion. Also, to help ensure that all eligible patients in the US have appropriate access to our products, we have established a reimbursement and patient support program called Rigel OneCare (ROC). Through ROC, we provide co-pay assistance to qualified, commercially insured patients to help minimize out-of-pocket costs and also provide free product to uninsured or under-insured patients who meet certain established clinical and financial eligibility criteria. In addition, ROC is designed to provide reimbursement support, such as information related to prior authorizations, benefits investigations and appeals.

In addition, our collaborative partner Grifols has launched TAVLESSE in the UK and certain countries in Europe including Germany, France, Italy and Spain, and continues a phased rollout across the rest of Europe. Our collaborative partner Medison has also launched TAVALISSE in Canada and Israel. Further, our collaborative partner Kissei has also recently launched TAVALISSE in Japan.

Fostamatinib in Global Markets

We have entered into various license agreements to commercialize fostamatinib globally. The following describes the arrangements we have in place with Grifols, Kissei, Medison, and Knight. We retain the global rights to fostamatinib outside of the Grifols, Kissei, Medison and Knight territories.

Fostamatinib in Europe/Turkey

We have a commercialization license agreement with Grifols entered in January 2019, for an exclusive rights to commercialize fostamatinib for human diseases, including chronic ITP and AIHA, and non-exclusive rights to develop, fostamatinib in their territory. Grifols territory includes Europe, the UK, Turkey, the Middle East, North Africa and Russia (including Commonwealth of Independent States).

We are responsible for performing and funding certain development activities for fostamatinib for ITP and AIHA and Grifols is responsible for all other development activities for fostamatinib in such territories. We remain responsible for the manufacturing and supply of fostamatinib for all development and commercialization activities under the agreement. Under the terms of the agreement, we received an upfront cash payment of $30.0 million and will be eligible to receive regulatory and commercial milestones of up to $297.5 million. In January 2020, the EC granted a MA for fostamatinib for the treatment of chronic ITP in adult patients who are refractory to other treatments. With this approval, we received a $20.0 million non-refundable milestone payment, consisted of a $17.5 million payment due upon MAA approval by the EMA of fostamatinib for the first indication and a $2.5 million creditable advance royalty payment due upon EMA approval of fostamatinib in the first indication. We are also entitled to receive stepped double-digit royalty payments based on tiered net sales which may reach 30% of net sales.

Fostamatinib in Japan/Asia

We have an exclusive license and supply agreement with Kissei entered in October 2018, to develop and commercialize fostamatinib in all current and potential indications in Kissei's territory which includes Japan, China, Taiwan and the Republic of Korea. Kissei is a Japan-based pharmaceutical company addressing patients' unmet medical needs through its research, development and commercialization efforts, as well as through collaborations with partners.

Under the terms of the agreement, we received an upfront cash payment of $33.0 million, with the potential for an additional $147.0 million in development and commercial milestone payments, and will receive product transfer price payments in the mid to upper twenty percent range based on tiered net sales for the exclusive supply of fostamatinib. Kissei receives exclusive rights to fostamatinib in ITP and all future indications in Kissei's territory.

In September 2019, Kissei initiated a Phase 3 trial in Japan of fostamatinib in adult Japanese patients with chronic ITP. The efficacy and safety of orally administered fostamatinib was assessed by comparing it with placebo in a randomized, double-blind study. Japan has the third highest prevalence of chronic ITP in the world behind the US and

Europe. In February 2020, Kissei was granted orphan drug designation from the Japanese Ministry of Health, Labor and Welfare for R788 (fostamatinib) in chronic ITP. In December 2021, Kissei reported positive top-line results for a Phase 3 clinical trial, meeting its primary endpoint. The Phase 3 clinical trial showed that patients receiving fostamatinib achieved a stable platelet response significantly higher than patients receiving a placebo control. Based on the positive Phase 3 results, in April 2022, Kissei submitted an NDA to Japan's PMDA for fostamatinib in chronic ITP. With this milestone event, we received $5.0 million non-refundable and non-creditable payment from Kissei and recognized the amount as revenue in the second quarter of 2022. In December 2022, Japan's PMDA approved TAVALISSE for the treatment of chronic ITP. With this milestone event, we were entitled to receive $20.0 million non-refundable and non-creditable payment from Kissei based on the terms of our collaboration agreement, and such amount was recognized as revenue in the fourth quarter of 2022. The amount was subsequently collected in January 2023. In April 2023, Kissei announced the commercial launch of TAVALISSE for chronic ITP in Japan.

Fostamatinib in Canada/Israel

We have an exclusive commercial and license agreements with Medison entered in October 2019, to commercialize fostamatinib in all potential indications in Canada and Israel. Under the terms of the agreements, we received an upfront payment of $5.0 million with the potential for approximately $35.0 million in regulatory and commercial milestones. In addition, we will receive royalty payments beginning at 30% of net sales. Under our agreement with Medison for the Canada territory, we have the option to buy back all rights to the product upon regulatory approval in Canada for the indication of AIHA. The buyback provision, if exercised, would require both parties to mutually agree on commercially reasonable terms for us to purchase back the rights, taking into account Medison's investment and the value of the rights, among others. Pursuant to this exclusive commercialization license agreement, in August 2020, we entered into a commercial supply agreement with Medison.

In November 2020, Health Canada approved the New Drug Submission for TAVALISSE for the treatment of thrombocytopenia in adult patients with chronic ITP who have had an insufficient response to other treatments. In August 2021, Medison Israel received the licenses for registrational approval from the Ministry of Health, which event entitled us to receive $0.1 million of non-refundable milestone payment. In November 2022, Medison Israel made its first commercial sale of TAVALISSE.

Fostamatinib in Latin America

In May 2022, we entered into commercial license agreement with Knight for the commercialization of fostamatinib for approved indications in Latin America, consisting of Mexico, Central and South America, and the Caribbean (Knight territory). Pursuant to such commercial license agreement, we received a $2.0 million one-time, non-refundable, and non-creditable upfront payment, with potential for up to an additional $20.0 million in regulatory and sales-based commercial milestone payments, and will receive twenty- to mid-thirty percent, tiered, escalated net-sales based royalty payments for products sold in the Knight territory. We are also responsible for the exclusive manufacture and supply of fostamatinib for all future development and commercialization activities under a Commercial and Supply Agreement.

REZLIDHIA in R/R AML with mIDH1

Disease background. mIDH1 alterations are seen in AML, glioma, chondrosarcoma, and intrahepatic cholangiocarcinoma. It is estimated that there are approximately 1,000 adult patients, a well-identified patient population, with mIDH1 R/R AML, part of an AML market estimated to have an incidence of 20,000 cases in the US and estimated 120,000 cases globally. Despite having approved treatment options for R/R AML patients who are mIDH1 positive, an unmet need remains. Olutasidenib may represent a treatment option with durable remissions, reduced QTc potential, and a stable pharmacokinetics profile that enables a consistent drug exposure over time.

In July 2022, we entered into a license and transition agreement with Forma for an exclusive license to develop, manufacture and commercialize olutasidenib, Forma's proprietary inhibitor of mIDH1, for any uses worldwide, including for the treatment of R/R AML and other malignancies. Olutasidenib is an oral, small molecule drug designed to selectively bind to and inhibit mIDH1. This targeted agent has the potential to provide therapeutic benefit by reducing 2-hydroxyglutarate levels and restoring normal cellular differentiation. IDH1 is a natural enzyme that is part of the normal metabolism of all cells. When mutated, IDH1 activity can promote blood malignancies and solid tumors.

Orally available olutasidenib program. REZLIDHIA (olutasidenib) is an oral, small molecule, inhibitor of mIDH1 designed to bind to and inhibit mIDH1 to reduce 2-hydroxyglutarate levels and restore normal cellular differentiation of myeloid cells. REZLIDHIA is a novel, non-intensive monotherapy treatment in the R/R AML setting demonstrating a CR+CRh rate of 35% in patients with over 90% of those responders in complete remission. The safety of REZLIDHIA 150 mg administered twice daily was evaluated in 153 adults with relapsed or refractory AML with an IDH1 mutation.

On December 1, 2022, the FDA has approved REZLIDHIA capsules for the treatment of adult patients with R/R AML with IDH1 mutation as detected by an FDA approved test. On December 22, 2022, we began the commercialization of REZLIDHIA and made it available to patients. The recommended dosage of REZLIDHIA is 150 mg taken orally twice daily until disease progression or unacceptable toxicity. The FDA approval was based on the NDA for olutasidenib for the treatment of m1DH1 R/R AML submitted by Forma, that had a PDUFA action date for the application of February 15, 2023. The NDA application was supported with Forma's Phase 2 registrational trial for olutasidenib in mIDH1 R/R AML. Interim results from Forma's Phase 2 registrational trial were reported at the American Society of Clinical Oncology (ASCO) annual meeting in June 2021. The interim results of this trial of 153 patients showed that olutasidenib demonstrated a favorable tolerability profile as a monotherapy in patients with R/R AML who have a susceptible mIDH1, and achieved a composite complete remission (CR), or CR plus CR with partial hematologic recovery (CRh) rate of 33.3% (30% CR and 3% CRh), the primary efficacy endpoint. While a median duration of CR/CRh was not yet reached, a sensitivity analysis (with a hematopoietic stem cell transplant, or HCST, as the end of a response) indicated the median duration of CR/CRh was 13.8 months**.** The overall response rate, comprised CR, CRh, CRi, partial response, and morphologic leukemia-free state (MLFS), was 46% and the median duration of ORR was 11.7 months. The median overall survival was 10.5 months. For patients with CR/CRh, the median overall survival was not reached, but the estimated 18-month survival was 87%. The most frequently reported treatment emergent adverse events were nausea, constipation, increased white blood cell count, decreased RBC count, pyrexia, febrile neutropenia, and fatigue. Subsequently, Forma presented the first Phase 2 results of olutasidenib used in combination with azacitidine, including safety/tolerability data, at the American Society of Hematology (ASH) Annual Meeting in December 2021. Olutasidenib was designated by the FDA as an orphan drug for the treatment of acute myeloid leukemia in April 2017.

On November 3, 2022, we announced the presentation of five posters highlighting data from our commercial and clinical hematology-oncology portfolio at the 64th ASH Annual Meeting and Exposition which was held in December 2022. An updated interim analysis from the Phase 2 registrational trial of olutasidenib in patients with R/R AML demonstrated robust efficacy and safety results. The registrational cohort of the Phase 2 trial enrolled 153 patients with mIDH1 R/R AML who received olutasidenib monotherapy 150 mg twice daily. The efficacy evaluable population was 147 patients who received their first dose at least six months prior to the interim analysis cutoff date of June 18, 2021. The primary endpoint was a CR/CRh defined as less than 5% blasts in the bone marrow, no evidence of disease, and partial recovery of peripheral blood counts (platelets >50,000/microliter and absolute neutrophil count >500/microliter). Overall response rate comprises CR, CRh, CR with incomplete blood count recovery, partial response and MLFS. The results from the updated interim analysis of patients with mIDH1 R/R AML demonstrated a 35% CR+CRh rate with a median duration of 25.9 months. Olutasidenib was effective in a broad range of patients including those with prior high-intensity chemotherapy and/or post-venetoclax. The abstract concluded that the observed activity is clinically meaningful and represents a therapeutic advance in the treatment of this patient population. In this pivotal cohort, olutasidenib was well tolerated with an adverse event profile largely characteristic of symptoms or conditions experienced by patients undergoing treatment for AML or of the underlying disease itself.

On November 10, 2022, we announced the publication of data in *The Lancet Haematology,* which summarizes the Phase 1 results of the Phase 1/2 trial of olutasidenib. The objectives of the first phase of the multi-center, open-label Phase 1/2 trial were to assess the safety, pharmacokinetic and pharmacodynamic profile, and clinical activity of olutasidenib, both as monotherapy and in combination with azacitidine, in patients with treatment-naïve or R/R AML or myelodysplastic syndrome (MDS) harboring IDH1 mutations. The published data suggest that olutasidenib, with or without azacitidine, was well-tolerated and was associated with improvements in clinical efficacy endpoints in patients with mIDH1 AML. This trial showed that olutasidenib has the potential to provide an additional treatment option for mIDH1 AML.

In January 2023, we announced that REZLIDHIA has been added by the National Comprehensive Cancer Network (NCCN) to the latest NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) for AML. REZLIDHIA is now included as a recommended targeted therapy for adult patients with R/R AML with IDH1 mutation.

In February 2023, we announced peer-reviewed publication data in *Blood Advances*, which summarize clinical results from the Phase 2 registrational trial of REZLIDHIA in patients with mIDH1 R/R AML. The published data demonstrate that REZLIDHIA induced durable remissions and transfusion independence with a well-characterized safety profile. The observed efficacy is clinically meaningful and represents a therapeutic advance in this poor prognosis patient population with limited treatment options. REZLIDHIA demonstrated both a high rate of response and an extended median duration of complete response of 28.1 months, which is more than a year longer than what is reported with the Standard of Care (SoC).

We plan to pursue strategic actions to further develop olutasidenib for the treatment of other malignancies and expansion of commercialization.

Competitive landscape for REZLIDHIA

There is currently one other product approved in the US for patients with IDH1 mutation. The FDA granted approval to TIBSOVO® (ivosidenib), an oral targeted IDH1 mutation inhibitor, (i) in July 2018, for adult patients with R/R AML with a susceptible IDH1 mutation, (ii) in May 2019, for newly diagnosed AML with a susceptible IDH1 mutation who are at least 75 years old or who have comorbidities that preclude use of intensive induction chemotherapy, (iii) in August 2021, for adult patients with previously treated, locally advanced or metastatic cholangiocarcinoma with an IDH1 mutation as detected by an FDA-approved test, and (iv) in May 2022, in combination with azacitidine (azacitidine for injection) for newly diagnosed AML with a susceptible IDH1 mutation, as detected by an FDA-approved test in adults 75 years or older, or who have comorbidities that preclude use of intensive induction chemotherapy. In addition, some clinicians may utilize non-targeted treatments for patients with mIDH1 R/R AML, including use of venetoclax combinations, hypomethylating agents, other chemotherapy regimens, or investigational agents that may be available to them.

Commercial activities, including sales and marketing

REZLIDHIA is highly synergistic with our existing hematology-oncology focused commercial and medical affairs infrastructure. Our commercial efforts will focus on targeting hematologists and hematologist-oncologists who manage patients with R/R AML with mIDH1. We plan to enter collaborations with third parties to commercialize REZLIDHIA outside of US.

Clinical Stage Programs

R289, an Oral IRAK1/4 Inhibitor for Hematology-Oncology, Autoimmune, and Inflammatory Diseases

Orally Available IRAK 1/4 Inhibitor Program. During the second quarter of 2018, we selected R835, the active metabolite of R289, a proprietary molecule from our IRAK 1/4 preclinical development program, for human clinical trials. This investigational candidate is an orally administered, potent and selective inhibitor of IRAK1 and IRAK4 that blocks inflammatory cytokine production in response to toll-like receptor (TLR) and the interleukin-1 receptor (IL-1R) family signaling. TLRs and IL-1Rs play a critical role in the innate immune response and dysregulation of these pathways can lead to a variety of inflammatory conditions. R835 prevents cytokine release in response to TLR and IL-1R activation in vitro. R835 is active in multiple rodent models of inflammatory disease including psoriasis, arthritis, lupus, multiple sclerosis and gout. Preclinical studies show that R835 inhibits both the IRAK1 and IRAK4 signaling pathways, which play a key role in inflammation and immune responses to tissue damage. Dual inhibition of IRAK1 and IRAK4 allows for more complete suppression of pro-inflammatory cytokine release than inhibition of either one individually.

In October 2019, we announced results from a Phase 1 clinical trial of R835 in healthy subjects to assess safety, tolerability, pharmacokinetics (PK) and pharmacodynamics. The Phase 1 trial was a randomized, placebo-controlled, double-blind trial in 91 healthy subjects, ages 18 to 55. The Phase 1 trial showed positive tolerability and PK data as well as established proof-of-mechanism by demonstrating the inhibition of inflammatory cytokine production in response to a lipopolysaccharide (LPS) challenge.

We continue to advance the development of our IRAK1/4 program, completing the evaluation of a new pro-drug formulation of R835, R289, in single-ascending and multiple ascending dose studies with positive safety results in 2021. In January 2022, we received clearance from the FDA on our clinical trial design to explore R289 in low-risk MDS. The open-label, Phase 1b trial will determine the tolerability and preliminary efficacy of R289 in patients with low-risk MDS who are refractory or resistant to prior therapies. In December 2022, we announced that we dosed the first patient in our Phase 1b trial of R289. The Phase 1b trial of R289 is expected to enroll approximately 22 patients. The primary objective of the trial is safety, with secondary and exploratory objectives to assess preliminary efficacy and characterize the pharmacokinetic and pharmacodynamic profile of R289. The safety and efficacy data from this Phase 1b trial, along with the safety and pharmacokinetic/pharmacodynamic data from the completed first-in-human study in heathy volunteers, are intended to be used to determine the recommended Phase 2 dose for future clinical development of R289 targeting lower-risk MDS. To date, we completed enrollment of the first cohort of the trial and enrollment of the second cohort is underway.

Fostamatinib in Hospitalized COVID-19 Patients

Disease background. COVID-19 is the infectious disease caused by Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2). SARS-CoV-2 primarily infects the upper and lower respiratory tract and can lead to acute respiratory distress syndrome (ARDS). Additionally, some patients develop other organ dysfunction including myocardial injury, acute kidney injury, shock resulting in endothelial dysfunction and subsequently micro and macrovascular thrombosis. Much of the underlying pathology of SARS-CoV-2 is thought to be secondary to a hyperinflammatory immune response associated with increased risk of thrombosis. SYK is involved in the intracellular signaling pathways of many different immune cells. Therefore, SYK inhibition may improve outcomes in patients with COVID-19 via inhibition of key Fc gamma receptor and c-type lectin receptor mediated drivers of pathology, such as inflammatory cytokine release by monocytes and macrophages, production of NETs by neutrophils, and platelet aggregation. Furthermore, SYK inhibition in neutrophils and platelets may lead to decreased thromboinflammation, alleviating organ dysfunction in critically ill patients with COVID-19.

Rigel-led Phase 3 Trial. In November 2020, we launched our FOCUS Phase 3 clinical trial to evaluate the safety and efficacy of fostamatinib in hospitalized COVID-19 patients without respiratory failure that have certain high-risk prognostic factors. In January 2021, we were awarded $16.5 million from the US Department of Defense's Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense (JPEO-CBRND) to support this Phase 3 clinical trial. This multi-center, double-blind, placebo-controlled, adaptive design study randomly assigns either fostamatinib plus SoC or matched placebo plus SoC (1:1) to targeted evaluable patients. Treatment is administered orally twice daily for 14 days with follow up to day 60. In December 2021, we expanded the inclusion criteria to include patients with more severe disease (NIAID Ordinal Scale 6) to more accurately reflect the clinically predominant patient population hospitalized with COVID-19 and help speed enrollment. In collaboration with the FDA and Department of Defense, we also updated the primary endpoint for the trial from progression to severe disease within 29 days, to the number of days on oxygen through day 29. This endpoint allows for closer comparison of the results with earlier results from the NIH/NHLBI Phase 2 clinical trial with fostamatinib and various other NIH-sponsored trials, such as the ACTIV-4 Host Tissue Trial, which uses a similar outcome measure as a primary endpoint. In July 2022, we completed enrollment with 280 patients. The trial had originally targeted a total of 308 patients; however, we determined the trial would be sufficiently powered with 280 patients to potentially provide a clinically meaningful result and determine the efficacy and safety of fostamatinib in hospitalized COVID-19 patients. On November 1, 2022, we announced the top-line results of the FOCUS trial. The trial approached but did not meet statistical significance (p=0.0603) in the primary efficacy endpoint of the number of days on oxygen through Day 29. All prespecified secondary endpoints in the trial numerically favored fostamatinib over placebo, including mortality, time to sustained recovery, change in ordinal scale assessment, and number of days in the ICU. We are evaluating the opportunity and discussing next steps with the FDA and in collaboration with our partner, the US Department of Defense.

NIH/NHLBI-sponsored Phase 2 Trial. In September 2020, we announced a Phase 2 clinical trial sponsored by the NIH/NHLBI to evaluate the safety of fostamatinib for the treatment of hospitalized COVID-19 patients. This multi-center, double-blind, placebo-controlled trial randomly assigned fostamatinib or matched placebo (1:1) to 59 evaluable patients. Treatment was administered orally twice daily for 14 days, and a follow-up period to day 60. The primary endpoint of this trial was cumulative incidence of Serious Adverse Events (SAEs) through day 29. The trial also included multiple secondary endpoints designed to assess the early efficacy and clinically relevant endpoints of disease course. The trial completed the enrollment in March 2021. In April 2021, we announced that the Phase 2 clinical trial met its primary endpoint of safety. Fostamatinib reduced the incidence of SAEs by half. By day 29, there were three SAEs in the fostamatinib plus SoC group of thirty patients compared to six SAEs in the placebo plus SoC group of twenty-nine patients (p=0.23). Of these, there was a reduction for the disease related SAE of hypoxia in the fostamatinib group compared to placebo (1 vs 3, respectively; p=0.29). The data from the NIH/NHLBI-Sponsored Phase 2 trial was published in Clinical Infectious Diseases, an official publication of the Infectious Disease Society of America in September 2021.

In May 2021, the NIH/NHLBI Phase 2 clinical data were submitted as part of a request for an EUA from the FDA for fostamatinib as a treatment for hospitalized patients with COVID-19. In August 2021, the FDA informed us that the clinical data submitted from the NIH/NHLBI-sponsored Phase 2 trial of fostamatinib to treat hospitalized patients suffering from COVID-19 was insufficient for an EUA.

ACTIV-4 Host Tissue Phase 2/3 Trial. In June 2021, we announced that fostamatinib had been selected for the NIH ACTIV-4 Host Tissue Trial in hospitalized patients with COVID-19. The ACTIV-4 Host Tissue Trial, initiated and funded by NHLBI, is a randomized, placebo-controlled trial of therapies, including fostamatinib, targeting the host response to COVID-19 in hospitalized patients. The master protocol for this trial was designed to be flexible in the number of study arms, the use of a single placebo group, and the stopping and adding of new therapies. Eligible participants include patients hospitalized for COVID-19 with laboratory-confirmed SARS-CoV-2 infection and a new need for oxygen therapy. The primary outcome is oxygen-free days through day 28. Secondary outcomes include 28-day hospital mortality, use of mechanical ventilation, and severity of disease as measured by World Health Organization (WHO) scale scores. The ACTIV-4 Host Tissue Trial is evaluating fostamatinib in a targeted population of approximately 600 hospitalized patients with COVID-19, 300 fostamatinib versus 300 placebo. An interim analysis of the trial was completed by the Data and Safety Monitoring Board with a recommendation for the trial to continue.

Imperial College of London Phase 2 Trial. In July 2020, we announced a Phase 2 clinical trial sponsored by Imperial College of London to evaluate the efficacy of fostamatinib for the treatment of COVID-19 pneumonia. This is a two-stage, open label, controlled clinical trial with patients randomized (1:1:1) to fostamatinib plus SoC, ruxolitinib plus SoC, or SoC alone. Treatment was administered twice daily for 14 days and patients receive a follow-up assessment at day 14 and day 28 after the first dose. The primary endpoint of this trial is progression from mild to severe COVID-19 pneumonia within 14 days in hospitalized patients (WHO COVID-19 Severity Scale 3-4). In April 2022, Imperial College of London completed a pre-planned interim analysis of the primary endpoint, patients progressing from mild or moderate (modified WHO COVID-19 scale 3-4) to severe disease (modified WHO COVID-19 scale ≥5) within 14 days, in the Phase 2 MATIS trial. The independent data monitoring committee determined that the fostamatinib plus SoC arm did not meet the prespecified criteria for continuation to the next stage of the trial. No safety concerns were identified. The trial remains blinded and Imperial College of London plans to share results with us and scientific community once the trial is complete.

Other Publications. Researchers at MIT and Harvard led a screen to identify FDA-approved compounds that reduce MUC1 protein abundance. MUC1 is a biomarker used to predict the development of ALI and ARDS and correlates with poor clinical outcomes. In June 2020, the results were presented, and of the 3,713 compounds that were screened, fostamatinib was the only compound identified which both decreased expression of MUC1 and is FDA approved. Fostamatinib demonstrated preferential depletion of MUC1 from epithelial cells without affecting cell viability. The research was focused on drug repurposing for the much lower risk of toxicity and the ability of FDA-approved treatments to be delivered on a shortened timescale, which is critical for patients afflicted with lung disease resulting from COVID-19.

In addition, the in vitro studies led by the Amsterdam University Medical Center at the University of Amsterdam, showed that R406, the active metabolite of fostamatinib, blocked macrophage hyperinflammatory responses

to a combination of immune complexes formed by anti-Spike IgG in serum from severe COVID-19 patients. Anti-Spike IgG levels are known to correlate with the severity of COVID-19. These results, presented in July 2020, suggest that by inhibiting anti-Spike IgG-mediated hyperinflammation, R406 could potentially play a role in the prevention of cytokine storms as well as pulmonary edema and thrombosis associated with severe COVID-19.

In December 2020, the Journal of Infectious Diseases published research from NIH which demonstrated that R406, the active metabolite of fostamatinib, was able to inhibit NETosis ex vivo in donor plasma from patients with COVID-19. NETosis is a unique type of cell death resulting in the release of NETs. NETs contribute to thromboinflammation and have been associated with mortality in COVID-19. These data provide insights for how fostamatinib may mitigate neutrophil-associated mechanisms contributing to COVID-19 immunopathogenesis.

Fostamatinib in wAIHA

Disease background. Autoimmune hemolytic anemia is a rare, serious blood disorder where the immune system produces antibodies that result in the destruction of the body's own red blood cells. Symptoms can include fatigue, shortness of breath, rapid heartbeat, jaundice or enlarged spleen. While no medical treatments are currently approved for AIHA, physicians generally treat acute and chronic cases of the disorder with corticosteroids, other immuno-suppressants, or splenectomy. Research has shown that inhibiting SYK with fostamatinib may reduce the destruction of red blood cells. AIHA affects an estimated 45,000 Americans, and approximately 36,000 of those patients have wAIHA, where no approved treatment options currently exist.

Orally available fostamatinib program. We completed our Phase 2 clinical trial, also known as the SOAR study, in patients with wAIHA. This trial was an open-label, multi-center, two-stage study that evaluated the efficacy and safety of fostamatinib in patients with wAIHA who had previously received treatment for the disorder but have relapsed. The primary efficacy endpoint of this study was to achieve increased hemoglobin levels by week 12 of greater than 10 g/dL, and greater than or equal to 2 g/dL higher than baseline. In November 2019, we announced updated data that in a Phase 2 open-label study of fostamatinib in patients with wAIHA, data showed that 44% (11/25) of evaluable patients met the primary efficacy endpoint of a hemoglobin level >10 g/dL with an increase of ≥2 g/dL from baseline by week 24. Including one late responder at week 30, the overall response rate was 48% (12/25). Adverse events were manageable and consistent with those previously reported with fostamatinib. In February 2022, the American Journal of Hematology published the data from our Phase 2 clinical trial of fostamatinib in adults with wAIHA who have failed at least one prior treatment. The published data demonstrate that fostamatinib rapidly and durably increased hemoglobin levels, with clinically meaningful hemoglobin responses observed in nearly half of the patients, and a safety and tolerability profile consistent with the existing fostamatinib safety database of patients across multiple disease programs studied.

In January 2021, we announced that the FDA had granted Fast Track designation to fostamatinib for the treatment of wAIHA. The FDA granted orphan drug designation for fostamatinib for the treatment of wAIHA in January 2018.

In March 2019, we initiated our wAIHA pivotal Phase 3 clinical trial of fostamatinib, known as the FORWARD study. The clinical trial protocol calls for a placebo-controlled study of 90 patients with primary or secondary wAIHA who have failed at least one prior treatment. The primary endpoint is a durable hemoglobin response, defined as hemoglobin >10 g/dL and >2 g/dL increase from baseline and durability measure, with the response not being attributed to rescue therapy. In November 2020, we reached an agreement with the FDA on the durable response measure for the primary efficacy endpoint of the trial as well as the inclusion of additional secondary endpoints. In November 2021, we completed the enrollment of this study. In April 2022, we completed the treatment period for the last patient under the trial. In June 2022, we announced top-line efficacy and safety data from the FORWARD study with 90 patients. Patients were randomized 1:1 to receive fostamatinib or matching placebo twice daily for 24 weeks. The primary efficacy endpoint of hemoglobin response was defined as achieving a hemoglobin ≥10 g/dL with an increase from baseline ≥2 g/dL on three consecutive available visits during the 24-week treatment period. The trial did not demonstrate statistical significance in the primary efficacy endpoint of durable hemoglobin response in the overall study population. The trial also included key secondary endpoints, including hemoglobin response on at least one visit, change in hemoglobin from baseline of ≥2 g/dL, use of permitted rescue therapy after week 4, change in hemoglobin from baseline to end of treatment and change from baseline to week 24 in Functional Assessment of Chronic Illness

Therapy – Fatigue scale. Across the trial's overall patient population, fostamatinib was generally well-tolerated. The safety profile of the product was consistent with prior clinical experience and no new safety issues were discovered. The most common adverse events (≥10%) with fostamatinib and placebo were diarrhea, hypertension, fatigue, pyrexia, nausea, and dyspnea. Treatment-related SAEs were 6.7% (3/45) for fostamatinib and 4.4% (2/45) for placebo. There were five deaths on the trial (2 with fostamatinib and 3 with placebo), all of which were determined to be unrelated to study drug. The safety results were consistent with the overall safety profile data collected to date, which includes more than 5,000 patients across multiple diseases. We conducted an in-depth analysis of these data to better understand differences in patient characteristics and outcomes and submitted these findings to the FDA. In October 2022, we announced that we received guidance from the FDA's review of these findings. Based on the result of the trial and the guidance from the FDA, we did not file an sNDA for this indication.

Of the 90 patients that completed the FORWARD study, 71 (79%) enrolled in the open-label extension study. We plan on closing this study in 2023.

Partnered Clinical Programs

BGB324 – BerGenBio

We have an exclusive, worldwide research, development and commercialization agreement with BerGenBio for our investigational AXL receptor tyrosine kinase inhibitor, BGB324/R428 (now referred to as bemcentinib). In October 2022, BerGenBio announced the initiation of a Phase 1b/2a trial evaluating bemcentinib in combination with the current SoC, checkpoint inhibitor pembrolizumab and doublet chemotheraphy, for the treatment of first line non-small cell lung cancer (NSCLC) patients harboring serine/threonine kinase 11 mutations. In February 2023, BerGenBio also announced positive data from Phase 2 trial of bemcentinib in combination with pembrolizumab in patients with second-line NSCLC. The treatment with bemcentinib in combination with pembrolizumab demonstrated long survival benefit and sustained disease control, particularly in patients with AXL TPS > 5, substantiating the relevance of AXL as a target and bemcentinib's selective inhibition capabilities in NSCLC. In March 2023, BerGenBio announced its first patient dosed in Phase 1B/2A trial evaluating bemcentinib in first-line NSCLC patients harboring STK11 mutations. The product is also being investigated in Phase 2 clinical trials in patients with AML and COVID-19. Bemcentinib is being studied in over 600 patients, demonstrating its safety as a monotherapy and in combination with chemotheraphy and immune checkpoint inhibition.

DS-3032 - Daiichi

DS-3032 is an investigational oral selective inhibitor of the MDM2 protein investigated by Daiichi in three Phase 1 clinical trials for solid and hematological malignancies including AML, acute lymphocytic leukemia, chronic myeloid leukemia in blast phase, lymphoma and MDS. Preliminary safety and efficacy data from a Phase 1 trial of DS-3032 suggests that DS-3032 may be a promising treatment for hematological malignancies including R/R AML and high-risk MDS.

In September 2020, worldwide rights to DS-3032 (milademetan) were out-licensed from Daiichi to Rain Oncology Inc., formerly Rain Therapeutics Inc. (Rain). In July 2021, Rain announced that it initiated a Phase 3 trial to evaluate the efficacy and safety of milademetan (RAIN-32) for the treatment of well-differentiated/dedifferentiated liposarcoma, a rare cancer originating from fat cells located in the soft tissues of the body and in August 2022, Rain announced the completion of enrollment of its Phase 3 trial for milademetan in liposarcoma. In late 2021, Rain commenced its second clinical trial for RAIN-32 in patients with MDM2-amplified advance solid tumors, and in November 2022, Rain provided an interim analysis of the trial which showed that the drug safety profile of milademetan is preliminary consistent with its prior Phase 1 trial.

Research, Preclinical and Clinical Development Programs

We have retained a selected team of experts in drug discovery and preclinical development to leverage our existing proprietary collection of inhibitors, small-molecule compound libraries and large database of associated phenotypic and biochemical assay results of therapeutic interest. We maintain leading expertise on specific areas of operation such as inhibition of SYK, IRAK1/4, RIPK1 and mIDH1 kinases to assist clinical development and commercial affairs, as well as to expand and explore additional opportunities for such inhibitors in the clinical

space. Our preclinical operations involve collaborations with clinical research organizations, leading investigators from universities and research organizations around the world, and strategic collaborations with other pharmaceutical companies.

We have assembled a team of experts in drug development to design and implement clinical trials and to analyze the data derived from these trials. The clinical development group possesses expertise in project management and regulatory affairs. We work with external clinical research organizations with expertise in managing clinical trials, drug formulation, and the manufacture of clinical trial supplies to support our drug development efforts.

Commercialization and Sponsored Research and License Agreements

For a discussion of our Sponsored Research and License Agreements and Government Contract, see "Note 4 - Sponsored Research and License Agreements and Government Contract" to our "Notes to Condensed Financial Statements" contained in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Results of Operations

Revenues

	Three Months Ended March 31,		Aggregate Change
	2023	2022	
		(in thousands)	
Product sales, net	$ 23,745	$ 16,197	$ 7,548
Contract revenues from collaborations	2,325	538	1,787
Government contract	—	—	—
Total revenues	$ 26,070	$ 16,735	$ 9,335

The following table summarizes the percentages of revenues from each of our customers who individually accounted for 10% or more of the total net product sales and revenues from collaborations:

	Three Months Ended March 31,	
	2023	2022
McKesson Specialty Care Distribution Corporation	45%	38%
Cardinal Healthcare	24%	28%
ASD Healthcare and Oncology Supply	22%	31%

Net product sales pertained to sales of our products in the US, net of chargebacks, discounts and fees, government and other rebates and returns. For the three months ended March 31, 2023, net product sales increased by 47% compared to the same period in 2022. The increase was primarily driven by increased TAVALISSE net product sales and the current period net product sales from REZLIDHIA. TAVALISSE net product sales increased by $6.1 million or 38% in the three months ended March 31, 2023 compared to the same period in 2022, primarily as a result of increased quantities sold and higher price per bottle, partially offset by increased revenue reserves mainly due to higher government and private payer rebates. In the three months ended March 31, 2023, we recognized $1.5 million of net product sales from REZLIDHA. We began our commercialization of REZLIDHIA in December 2022. Our first quarter net sales are typically impacted by the first quarter reimbursement issues such as the resetting of co-pays and the Medicare donut hole.

Contract revenues from collaborations in the three months ended March 31, 2023 consisted primarily of revenue from Grifols related to the delivery of drug supplies of $1.6 million and royalty revenue of $0.7 million. Contract revenues from collaborations in the three months ended March 31, 2022 consisted primarily of $0.2 million in revenue related to our license agreement with Lilly, and $0.3 million in revenue related to the research and development services with Grifols.

No government contract revenue was recognized in the three months ended March 31, 2023 and 2022. Government contract revenue is primarily derived from income we recognize from the $16.5 million government award granted to us, pursuant to the agreement we entered in January 2021 with the US Department of Defense to support our

ongoing Phase 3 clinical trial to evaluate the safety and efficacy of fostamatinib in hospitalized COVID-19 patients. Through March 31, 2023, we received $15.0 million of the awards which we recognized as revenue in the respective periods, with remaining $1.5 million awards available, subject to us meeting certain clinical trial events or milestones and approval by the US Department of Defense as specified in the agreement.

Our potential future revenues may include product sales, payments from our collaboration partners and from new collaboration partners with whom we enter into agreements in the future, if any, and from existing government grants and any future grants we may be entitled to, if any, the timing and amount of which is unknown at this time. Our net product sales may be impacted by changes to the government program rebates and new private payer rebate contracts we entered or may enter in the future. As of March 31, 2023, we had deferred revenues of $1.4 million, which we will recognize as revenue upon satisfaction of our remaining performance obligations under our respective collaboration agreements.

Cost of Product Sales

	Three Months Ended March 31,		Aggregate Change
	2023	2022	
	(in thousands)		
Cost of product sales	$ 977	$ 121	$ 856

The cost of product sales includes the cost of inventories sold to specialty distributors and to our collaborative partners. Inventories sold for the periods presented include inventory quantities acquired or produced prior to the FDA approval of the product, and do not reflect the full cost of the inventories sold, since such costs incurred prior to FDA approval were previously expensed and charged to research and development expense. We expect to continue to have a lower cost of product sales as we sell inventory quantities that were acquired or produced prior to the FDA approval of the product, until we sell inventory quantities reflecting the full cost. We expect that this will be the case in the near term, and as a result, our cost of product sales will be less than we anticipate it will be in future periods. As we acquire or produce more FDA approved inventory quantities in the future, our inventory cost in the balance sheet and cost of product sales will increase, reflecting the full cost of acquiring or producing such products. Further, following the approval of REZLIDHIA, we recognize amortization expense from capitalized intangible asset and royalty expense on REZLIDHIA sales within cost of sales.

The increase in cost of product sales in the three months ended March 31, 2023 compared to the same period in 2022 was partly due to amortization of capitalized intangible asset of $0.3 million and royalty expense of $0.2 million recorded within cost of sales in the three months ended March 31, 2023. No such expenses were incurred in the same period in 2022. Incrementally, cost of sales increased due to the increase in inventory quantities sold to our specialty distributors and delivery of drug supplies pursuant to our supply agreements with our collaborative partners.

Research and Development Expense

	Three Months Ended March 31,		Aggregate Change
	2023	2022	
	(in thousands)		
Research and development expense	$ 10,089	$ 15,474	$ (5,385)
Stock-based compensation expense included in research and development expense	$ 1,023	$ 468	$ 555

Stock-based compensation expense included within research and development in the three months ended March 31, 2023 include an incremental charge of approximately $0.5 million from stock option modifications related to the acceleration of vesting and extension of exercise period of vested stock option grants made to a former officer whose employment ended in March 2023.

The decrease in research and development expense in three months ended March 31, 2023 compared to the same period in 2022 was mainly due to the winding down of activities related to our two Phase 3 clinical trials of fostamatinib for the treatment of hospitalized high-risk patients with COVID-19 of $2.5 million and evaluating fostamatinib for the treatment of wAIHA of $1.3 million, as well as timing of activities related to our IRAK 1/4 inhibitor

program of $1.4 million. In addition, personnel-related costs decreased by $0.4 million, and other research and development expenses including allocated facilities and laboratory costs decreased by $0.4 million. These decreases were partially offset by higher stock-based compensation expense of $0.6 million primarily due to stock option modifications as discussed above.

Our research and development expenditures include costs related to preclinical and clinical trials, scientific personnel, supplies, equipment, consultants, sponsored research, stock-based compensation, allocated facility costs, and upfront payment related to our in-licensed agreement with Forma. We expect to continue to incur significant research and development expense as we continue our activities in our clinical studies including our IRAK 1/4 inhibitor program. In July 2022, we completed the enrollment of the FOCUS Phase 3 clinical trial of fostamatinib for the treatment of hospitalized high-risk patients with COVID-19 and on November 1, 2022, we announced the top-line results did not meet statistical significance in the primary efficacy endpoint. We are evaluating the opportunity and discussing next steps with the FDA and in collaboration with our partner, the US Department of Defense. Our Phase 3 clinical trial for hospitalized COVID-19 patients is partially funded by the award granted to us by the US Department of Defense as discussed above. Our Phase 3 wAIHA study completed enrollment in November 2021, and in June 2022, we announced that the top-line results did not demonstrate statistical significance in the primary efficacy endpoint. In October 2022, we announced that we received guidance from the FDA's further review of these findings. Based on the result of the trial and the guidance from FDA, we did not file an sNDA for this indication.

We do not track fully burdened research and development costs separately for each of our drug candidates. We review our research and development expenses by focusing on three categories: research, development, and other. Our research team is focused on identifying and evaluating product candidates in our focused range of therapeutic indications that can be developed into small molecule therapeutics in our own proprietary programs or with potential collaborative partners. "Research" expenses relate primarily to personnel expenses, lab supplies, fees to third party research consultants and compounds. Our development group leads the implementation of our clinical and regulatory strategies and prioritizes disease indications in which our compounds may be studied in clinical trials. "Development" expenses relate primarily to clinical trials, personnel expenses, costs related to our regulatory filings, lab supplies and fees to third party research consultants. "Other" expenses primarily consist of allocated facilities costs and allocated stock-based compensation expense relating to personnel in research and development groups. "Other" expenses also include the upfront payment to Forma and pre-regulatory approval milestone recorded as research and development expense in 2022.

In addition to reviewing the three categories of research and development expenses described in the preceding paragraph, we principally consider qualitative factors in making decisions regarding our research and development programs, which include enrollment in clinical trials and the results thereof, the clinical and commercial potential for our drug candidates and competitive dynamics. We also make our research and development decisions in the context of our overall business strategy, which includes the evaluation of potential collaborations for the development of our drug candidates.

We do not have reliable estimates regarding the timing of our clinical trials. Preclinical testing and clinical development are long, expensive and uncertain processes. In general, biopharmaceutical development involves a series of steps, beginning with identification of a potential target and including, among others, proof of concept in animals and Phase 1, 2 and 3 clinical trials in humans. Significant delays in clinical testing could materially impact our product development costs and timing of completion of the clinical trials. We do not know whether planned clinical trials will begin on time, will need to be halted or revamped or will be completed on schedule, or at all. Clinical trials can be delayed for a variety of reasons, including delays in obtaining regulatory approval to commence a trial, delays from scale up, delays in reaching agreement on acceptable clinical trial agreement terms with prospective clinical sites, delays in obtaining institutional review board approval to conduct a clinical trial at a prospective clinical site or delays in recruiting subjects to participate in a clinical trial. Further, the evolving effects of COVID-19 pandemic may affect our ability to continue to treat patients enrolled in our trials, enroll and assess new patients, supply study drug, obtain complete data points in accordance with the study protocol, and overall impact on, and timing of, clinical trial results.

We currently do not have reliable estimates of total costs for a particular drug candidate to reach the market. Our potential products are subject to a lengthy and uncertain regulatory process that may involve unanticipated additional clinical trials and may not result in receipt of the necessary regulatory approvals. Failure to receive the

necessary regulatory approvals would prevent us from commercializing the product candidates affected. In addition, clinical trials of our potential products may fail to demonstrate safety and efficacy, which could prevent or significantly delay regulatory approval.

The following table presents our total research and development expense by category (in thousands).

	Three Months Ended March 31,		From January 1, 2007* to March 31, 2023
	2023	2022	
Categories:			
Research	$ 503	$ 1,034	$ 267,786
Development	7,940	12,715	550,760
Other	1,646	1,725	275,802
	$ 10,089	$ 15,474	$ 1,094,348

* We started tracking research and development expense by category on January 1, 2007.

"Other" expenses for the three months ended March 31, 2023 and 2022 consisted of allocated facilities costs of $0.6 million and $1.3 million, respectively, and stock-based compensation expense of $1.0 million and $0.5 million, respectively. For the three months ended March 31, 2023, a major portion of our total research and development expense was associated with our IRAK program. For the three months ended March 31, 2022, a major portion of our total research and development expense was associated with our COVID-19, AIHA and IRAK programs.

Selling, General and Administrative Expense

	Three Months Ended March 31,		Aggregate Change
	2023	2022	
	(in thousands)		
Selling, general and administrative expense	$ 27,729	$ 27,401	$ 328
Stock-based compensation expense included in selling, general and administrative expense	$ 1,735	$ 2,739	$ (1,004)

Stock-based compensation expense included within selling, general and administrative in the three months ended March 31, 2022 include an incremental charge of approximately $0.8 million from stock option modifications to extend the exercise period of the stock option grants made to our two former Board of Directors whose terms expired in May 2022.

The increase in selling, general and administrative expense in the three months ended March 31, 2023 compared to the same period in 2022 was mainly due to increased expenses on consulting and third party services of $1.7 million, partially offset by lower stock-based compensation expense of $1.0 million primarily due to the stock option modifications as discussed above, and decreased other various sales, general and administrative costs of $0.4 million.

We expect our selling, general and administrative expenses to increase as we continue to expand our commercial activities of our products. We expect some cost savings on our general and administrative costs in the future because of reduction in workforce in our administrative group in October 2022. We continue to deploy resources to enable our field-based employees to engage with healthcare providers. These engagements have enabled our field team to cover existing prescribers, as well as develop relationships with new prescribers to identify appropriate patients for our products. However, due to the evolving effects of COVID-19 pandemic, we may not be able to fully forecast the scope of impacts it may have on our commercial activities and sales of our product.

Interest Income and Interest Expense

	Three Months Ended March 31,		Aggregate Change
	2023	2022	
	(in thousands)		
Interest income	$ 393	$ 21	$ 372
Interest expense	$ (1,204)	$ (1,205)	$ 1

Interest income is related to our interest-bearing cash and investment balances.

Interest expense for the periods presented comprised primarily of interest on the outstanding term loan with MidCap. Interest expense on our term loan with Midcap increased by approximately $0.7 million in the three months ended March 31, 2023, compared to the same period in 2022, primarily due to the increase in the outstanding term loan balance, as well as higher interest rate. This increase was offset by the interest expense recognized in the three months ended March 31, 2022 related to the accretion of financing liability with Lilly amounting to $0.7 million.

Critical Accounting Policies and Use of Estimates

Our discussion and analysis of our financial condition and results of operations is based upon our financial statements, which have been prepared in accordance with US GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Our critical accounting estimates are described in “Item 7 – Management’s Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Estimates” in our Annual Report on Form 10-K. There had been no material changes to these accounting policies.

Our significant accounting policies are described in “Note 1 – Description of Business and Summary of Significant Accounting Policies” to our “Notes to Financial Statements” contained in “Part II, Item 8, Financial Statements and Supplementary Data” of our Annual Report on Form 10-K for the year ended December 31, 2022. There have been no material changes to these accounting policies.

Recent Accounting Pronouncements

No new accounting guidance was adopted during the period. Recently issued accounting guidance is not applicable or did not have, or is not expected to have, a material impact to us.

Liquidity and Capital Resources

Liquidity

As of March 31, 2023 and December 31, 2022, we had approximately $58.7 million and $58.2 million, respectively, in cash, cash equivalents and short-term investments. We continue to maintain investment portfolios primarily in money market funds, government-sponsored enterprise securities, and corporate bonds and commercial paper. Cash in excess of immediate requirements is invested with regard to liquidity and capital preservation. We view our investments portfolio as available-for-sale and are available for use in current operations. Wherever possible, we seek to minimize the potential effects of concentration and degrees of risk. We continue to monitor the impact of the changes in the conditions of the credit and financial markets to our investment portfolio and assess if future changes in our investment strategy are necessary.

We maintain a depository relationship with SVB. On March 10, 2023, SVB was closed by the California Department of Financial Protection and Innovation, which appointed the FDIC as receiver. On March 12, 2023, federal regulators announced that the FDIC would complete its resolution of SVB in a manner that fully protects all depositors. On March 27, 2023, FCB announced that it entered into an agreement with FDIC to purchase all of the asset and

liabilities of SVB. Customers of SVB automatically become customers of FCB following the acquisition. To date and as of March 31, 2023, the amount of our cash held on deposit with SVB/FVB was not material with respect our total cash, cash equivalents and short-term investments. All of our cash deposits with SVB/FCB are accessible to us, and we do not anticipate any losses with respect to such funds.

Following summarizes our cash flow activity for the periods presented:

	Three Months Ended March 31,	
	2023	2022
	(in thousands)	
Net cash provided by (used in):		
Operating activities	$ (4,074)	$ (25,637)
Investing activities	777	22,629
Financing activities	19,123	8,797
Net increase in cash and cash equivalents	$ 15,826	$ 5,789

Net cash used in operating activities for the three months ended March 31, 2023 was primarily related to payments for our operating expenses, partially offset by the proceeds from sales of our products (TAVALISSE and REZLIDHIA), and the timing of cash receipt from our collaboration partners, including the $20.0 million regulatory milestone payment from Kissei received in January 2023. Net cash used in operating activities for the three months ended March 31, 2022 was primarily related to payments for our operating expenses, partially offset by the proceeds from sales of our product (TAVALISSE), cash received from collaboration partners, and cash received from the award granted by the US Department of Defense.

Net cash provided by investing activities for the three months ended March 31, 2023 comprises maturities of short-term investments of $15.7 million and proceeds from sale of property and equipment of $0.1 million, partially offset by the payment of milestone obligations to Forma recorded as intangible assets of $15.0 million. Net cash provided by investing activities for the three months ended March 31, 2022 comprises net maturities of short-term investments of $22.9 million, partially offset by purchases of property and equipment of $0.2 million.

Net cash provided by financing activities for the three months ended March 31, 2023 was primarily due to the net cash proceeds from term loan financing (Tranche 5) of $20.0 million, partially offset by our cost share payments to Lilly of $0.8 million. Net cash provided by financing activities for the three months ended March 31, 2022 was primarily due to the net cash proceeds from term loan financing (Tranche 3) of $10.0 million and proceeds from exercise of stock options of $0.9 million, partially offset by our payment of cost share to Lilly of $2.1 million.

We believe that our existing capital resources will be sufficient to support our current and projected funding requirements, including the continued commercialization of our products, through at least the next 12 months from the Form 10-Q filing date. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with commercializing a product, the development of our product candidates and other research and development activities, we are unable to estimate with certainty our future product revenues, our revenues from our current and future collaborative partners, the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials and other research and development activities.

Capital Resources

Since inception, we have financed our operations primarily through sales of equity securities, debt financing, from sales of our products, and contract payments under our collaboration agreements.

Under our existing collaboration agreements that we entered in the ordinary course of business, we received or may be entitled to receive upfront cash payments, payments contingent upon specified events achieved by such partners and royalties on any net sales of products sold by such partners under the agreements. As of March 31, 2023, total future contingent payments to us under our existing agreements, excluding terminated agreements, could exceed $1.3 billion if all potential product candidates achieved all of the payment triggering events under all of our current agreements. This estimated future contingent amount does not include any estimated royalties that could be due to us if the partners

successfully commercialize any of the licensed products. Future events that may trigger payments to us under the agreements are based solely on our partners' future efforts and achievements of specified development, regulatory and/or commercial events. See further discussion in "Note 4 - Sponsored Research and License Agreements and Government Contract" to our "Notes to Condensed Financial Statements" contained in Part I, Item 1 of this Quarterly Report on Form 10-Q.

In January 2021, we were awarded $16.5 million by the US Department of Defense to support our ongoing Phase 3 clinical trial to evaluate the safety and efficacy of fostamatinib in hospitalized COVID-19 patients. Under the agreement with the US Department of Defense, we are entitled to receive such award based on the agreed-upon payment schedule, subject to submission of proper documentation as evidence of completion of certain clinical trial events or milestones as specified in the agreement, and approval by the US Department of Defense that such events or milestones have been met. Through March 31, 2023, we received $15.0 million of the awards which we recognized as revenue in the respective periods, with remaining $1.5 million awards available, subject to us meeting certain clinical trial events or milestones and approval by the US Department of Defense as specified in the agreement.

In August 2020, we entered into an Open Market Sale Agreement with Jefferies LLC (Jefferies), as a sole agent, pursuant to which we may sell from time to time, through Jefferies, shares of our common stock in sales deemed to be "at-the-market offerings" as defined in Rule 415 under the Securities Act, subject to conditions specified in the Open Market Sale Agreement, including maintaining an effective registration statement covering the sale of shares under the Open Market Sale Agreement. We have a shelf registration statement filed with the SEC that was declared effective on May 3, 2022, which registered, among other securities, a base prospectus which covers the offering, issuance, and sale by us of up to $250.0 million in the aggregate of the securities identified from time to time in one or more offerings, which include the $100.0 million of shares of our common stock that may be offered, issued and sold under the Open Market Sale Agreement. As of March 31, 2023, we have not sold any shares of common stock under such Open Market Sale Agreement.

We have a Credit Agreement with MidCap entered in September 2019, and subsequently amended in March 2021 (First Amendment), in February 2022 (Second Amendment) and in July 2022 (Third Amendment). The Credit Agreement provides for $60.0 million term loan credit facility, which was fully funded as of March 31, 2023. To date, no remaining funds are available for draw under the term loan credit facility with Midcap.

Our operations will require significant additional funding in the foreseeable future. Unless and until we can generate sufficient cash from our operating activities, we may choose to raise additional funds through public and/or private offerings of equity securities, debt financings, or from other sources. However, certain external factors such as COVID-19, conflicts in Russia and Ukraine, political and economic legislations, and other factors may continue to rapidly evolve which could significantly disrupt the global financial markets. Our ability to raise additional funds may be adversely impacted by potential worsening of global economic conditions and volatility in the credit and financial markets in the US and worldwide. We could experience an inability to access additional funds, which could in the future negatively affect our capacity for certain corporate development transactions or our ability to make important, opportunistic investments. To the extent that we raise additional funds through the sale of equity, our shareholders' ownership interest may experience substantial dilution. Our current credit facility with MidCap and any debt financing that we can obtain in the future may involve operating covenants that may restrict our business. To the extent that we raise additional funds through collaboration and licensing arrangements, we may be required to relinquish some of our rights to our technologies or product candidates or grant licenses on terms that are not favorable to us.

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

- the ongoing costs to commercialize our products, or any other future product candidates, if any such candidate receives regulatory approval for commercial sale;
- our ability to generate expected revenue from our commercialization efforts;
- the progress and success of our clinical trials and preclinical activities (including studies and manufacture of materials) of our product candidates conducted by us;
- our ability to meet operating covenants under our current and future credit facilities, if any;
- our ability to enter into partnering opportunities across our pipeline within and outside the US;

- the costs and timing of regulatory filings and approvals by us and our collaborators;
- the progress of research and development programs carried out by us and our collaborative partners;
- any changes in the breadth of our research and development programs;
- the ability to achieve the events identified in our collaborative agreements that may trigger payments to us from our collaboration partners;
- our ability to acquire or license other technologies or compounds that we may seek to pursue;
- our ability to manage our growth;
- competing technological and market developments;
- the costs and timing of obtaining, enforcing and defending our patent and other intellectual property rights; and
- expenses associated with any unforeseen litigation, including any arbitration and securities class action lawsuits.

Insufficient funds may require us to delay, scale back or eliminate some or all of our commercial efforts and/or research or development programs, to lose rights under existing licenses or to relinquish greater or all rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose or may adversely affect our ability to operate as a going concern.

Material Cash Requirements

We conduct our commercial activities and research and development programs internally and through third parties that include, among others, arrangements with vendors, consultants, contract research organizations (CROs) and universities. We have contractual arrangements with these parties, however our contracts with them are cancelable generally on reasonable notice within one year and our obligations under these contracts are primarily based on services performed. We do not have any purchase commitments under any collaboration arrangements.

We have agreements with certain clinical research organizations to conduct our clinical trials and with third parties relative to our commercialization of our products. The timing of payments for any amounts owed under the respective agreements will depend on various factors including, but not limited to, patient enrollment and other progress of the clinical trial and various activities related to commercial launch. We expect we will continue to enter into contracts in the normal course of business with various third parties who support our clinical trials, support our preclinical research studies, and provide other services related to our operating purposes as well as our commercialization of our products. We can terminate these agreements at any time, and if terminated, we would not be liable for the full amount of the respective agreements. Instead, we will be liable for services provided through the termination date plus certain cancellation charges, if any, as defined in each of the respective agreements. In addition, these agreements may, from time to time, be subjected to amendments as a result of any change orders executed by the parties.

As discussed in detail in “Note 4 – Sponsored Research and License Agreements and Government Contract” of our “Notes to Condensed Financial Statements” contained in Part I, Item 1 of this Quarterly Report on Form 10-Q, pursuant to our global exclusive license agreement and strategic collaboration agreement with Lilly, we are responsible for funding the development costs for R552 in the US, Europe, and Japan, up to $65.0 million through April 1, 2024. Through March 31, 2023, Lilly billed us $15.9 million of the funding development costs and the amounts were fully paid as of March 31, 2023. We have the right to opt-out of co-funding of development costs at two different specified times. If we decide not to exercise our opt-out rights, we will be required to share in global development costs up to certain amounts at a specified cap, as set forth in the agreement.

Additionally, as discussed in detail in "Note 4 – Sponsored Research and License Agreements and Government Contract" of our "Notes to Condensed Financial Statements" contained in Part I, Item 1 of this Quarterly Report on Form 10-Q, pursuant to our license and transition services agreement with Forma entered in July 2022, Forma is entitled to potential development and regulatory milestone payments of up to $67.5 million, commercial milestone payments of up to $165.5 million, and tiered royalty payments. As of December 31, 2022, certain milestones were met which entitled Forma to receive $17.5 million milestone payments, of which, $2.5 million was paid in the fourth quarter of 2022 and $15.0 million was paid in the first quarter of 2023. No new milestone was met during the three months ended March 31, 2023.

As of March 31, 2023, we have a contractual commitment related to our leased facilities of $1.6 million, with approximately $0.7 million payable within 12 months. See "Note 10 – Leases" to our "Notes to Condensed Financial Statements" contained in Part I, Item 1 of this Quarterly Report on Form 10-Q for further discussions of our leases.

As discussed above, we have a contractual commitment with respect to our credit facility with MidCap. Under the amended Credit Agreement, the term loans mature on September 1, 2026, and the interest-only period is through October 1, 2024. The interest rate applicable to the term loans under the amended Credit Agreement is the sum of one-month SOFR, plus an adjustment of 0.11448%, subject to 1.50% applicable floor, plus applicable margin of 5.65%. A final payment fee of 2.5% of principal is due at maturity date of the term loans. As of March 31, 2023, the outstanding principal amount of the loan was $60.0 million, and no principal payments are due within 12 months. We are also obligated to pay annual administrative fees. As of March 31, 2023, future interest calculated using the base interest rate as per the Credit Agreement, and the final fee payments associated with the credit facility amounted to $12.8 million, with approximately $4.4 million payable within 12 months.

We are also subject to claims related to the patent protection of certain of our technologies, as well as purported securities class action lawsuit, other litigations, and other contractual agreements. We are required to assess the likelihood of any adverse judgments or outcomes to these matters as well as potential ranges of probable losses. A determination of the amount of reserves required, if any, for these contingencies is made after careful analysis of each individual matter. We do not have other material contractual commitments with respect to matters discussed above.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate sensitivities related to our short-term investments and outstanding loans. There were no material changes to our quantitative and qualitative disclosures about market risk related to our investment activities during the three months ended March 31, 2023 as disclosed in "Item 7A. Quantitative and Qualitative Disclosures About Market Risks" of our Annual Report on Form 10-K for the year ended December 31, 2022.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures. Based on the evaluation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), our chief executive officer (who serves as our principal executive officer) and our chief financial officer (who serves as our principal financial officer) have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective.

Changes in Internal Controls. There were no changes in our internal control over financial reporting that occurred during the quarter ended March 31, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Controls. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the controls are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met and, as set forth above, our chief executive officer and chief financial officer have concluded, based on their evaluation as of the end of the

period covered by this report, that our disclosure controls and procedures were sufficiently effective to provide reasonable assurance that the objectives of our disclosure control system were met.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we may be a party or subject to legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. Some of these proceedings that we may be involved in the future, are claims that are subject to substantial uncertainties and unascertainable damages or other remedies.

In June 2022, we received a notice letter regarding an ANDA submitted to the FDA by Annora, requesting approval to market a generic version of TAVALISSE. In July 2022, we filed a lawsuit in the United States District Court for the District of New Jersey against Annora and its subsidiaries for infringement of certain of our US patents. In September 2022, Annora and its affiliates answered and counterclaimed for declaratory judgment of non-infringement and invalidity of certain patents. We filed an answer to Annora's counterclaims in October 2022. Annora served invalidity and non-infringement contentions in December 2022. We filed an answer to Annora's invalidity and non-infringement contentions in March 2023. We intend to vigorously enforce and defend our intellectual property related to TAVALISSE. For a more detailed discussion of this litigation matter, see Part I, Item 3, "Legal Proceedings" of our Annual Report on Form 10-K as of December 31, 2022.

Item 1A. Risk Factors

In evaluating our business, you should carefully consider the following risks, as well as the other information contained in this Quarterly Report on Form 10-Q. These risk factors could cause our actual results to differ materially from those contained in forward-looking statements we have made in this Quarterly Report on Form 10-Q and those we may make from time to time. If any of the following risks actually occurs, our business, financial condition and operating results could be harmed. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business.

We have marked with an asterisk (*) those risk factors below that reflect a substantive change from the risk factors included in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 7, 2023, if any.

Risk Factor Summary

- Our prospects are highly dependent on our first commercial product, TAVALISSE® (fostamatinib disodium hexahydrate) and our recently launched second commercial product, REZLIDHIA™ (olutasidenib). To the extent that the commercial success of our products in the US and respective territories outside of the US is diminished or is not commercially successful, our business, financial condition and results of operations may be adversely affected, and the price of our common stock may decline.
- We may not be able to successfully develop or commercialize our product candidates if problems arise in the clinical testing and approval process. There is a high risk that drug discovery and development efforts might not generate successful product candidates. If the results of our clinical trials do not meet the primary efficacy endpoints, or if the top-line data from the results of our clinical trials may not ultimately meet the requirements for an NDA approval by the FDA and other national regulatory authorities, the commercial prospects of our business may be harmed, and our ability to generate product revenues may be delayed or eliminated.
- Even if we, or any of our collaborative partners, are able to continue to commercialize our products or any product candidate that we, or they, develop, the product may become subject to unfavorable pricing regulations, unfavorable health technology assessments (HTA) assessment, third-party payor reimbursement practices or labeling restrictions, all of which may vary from country to country and any of which could harm our business.
- If we are unable to successfully market and distribute our products and retain experienced commercial personnel, our business will be substantially harmed.
- Our business was adversely affected and could be materially and adversely affected in the future by the evolving effects of the COVID-19 pandemic as a result of the potential future impacts on our commercialization efforts, supply chain, regulatory, clinical development and corporate development activities and other business operations, in addition to the impact of a global economic slowdown.
- We are subject to stringent and evolving privacy and information security laws, regulations, rules, policies and contractual obligations, and changes in such laws, regulations, rules, policies, contractual obligations and our actual or perceived failure to comply with such requirements could subject us to significant investigations, fines, penalties, and claims, any of which may have a material adverse effect on our business, financial condition, results of operations or prospects.
- If manufacturers obtain approval for generic versions of our products, or of products with which we compete, our business may be harmed.
- Unforeseen safety issues could emerge with our products that could require us to change the prescribing information to add warnings, limit use of the product, and/or result in litigation. Any of these events could have a negative impact on our business.
- We rely and may continue to rely on third party distribution facilities for the sale of our products and potential sale of any of our product candidates. If any or all of them become subject to adverse findings from inspections or face other difficulties to operate, then the distribution of our products may be interrupted or otherwise

adversely affected.

- We lack the capability to manufacture compounds for clinical development and we intend to rely on third parties for commercial supply, manufacturing and distribution, if any, of our product candidates which receive regulatory approval and we may be unable to obtain required material or product in a timely manner, at an acceptable cost or at a quality level required to receive regulatory approval.
- Any product for which we have obtained regulatory approval, or for which we obtain approval in the future, is subject to, or will be subject to, extensive ongoing regulatory requirements by the FDA, EMA and other comparable regulatory authorities, and if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, we may be subject to penalties, we will be unable to generate revenue from the sale of such products, our potential for generating positive cash flow will be diminished, and the capital necessary to fund our operations will be increased.
- If our corporate collaborations or license agreements are unsuccessful, or if we fail to form new corporate collaborations or license agreements, our research and development efforts could be delayed.
- Our success is dependent on intellectual property rights held by us and third parties, and our interest in such rights is complex and uncertain.
- If a dispute arises regarding the infringement or misappropriation of the proprietary rights of others, such dispute could be costly and result in delays in our research and development activities, partnering and commercialization activities.
- If our competitors develop technologies that are more effective than ours, our commercial opportunity will be reduced or eliminated.
- If product liability lawsuits are successfully brought against us, we may incur substantial liabilities and may be required to limit commercialization of our products.

Risks Related to Our Business and Our Industry

If the market opportunities for our products and product candidates are smaller than we believe they are, our revenues may be adversely affected, and our business may suffer.

Certain of the diseases that our products and our other product candidates being developed to address are in underserved and underdiagnosed populations. Our projections of both the number of people who have these diseases, as well as the subset of people with these diseases who will seek treatment utilizing our products or product candidates, may not be accurate. If our estimates of the prevalence or number of patients potentially on therapy prove to be inaccurate, the market opportunities for fostamatinib and our other product candidates may be smaller than what we believe they are, our prospects for generating expected revenue may be adversely affected and our business may suffer.

We may need to continue to increase the size of our organization and we may encounter difficulties with managing our growth, which could adversely affect our business and results of operations.

While we have substantially increased the size of our organization particularly in our sales force in the third quarter of 2021, we also implemented two separate reductions in workforce in November 2021 and October 2022, and may need to add additional qualified personnel and resources to support our commercial activities and expected growth. Our current infrastructure may be inadequate to support our development and commercialization efforts and expected growth. Future growth will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees, and may take time away from running other aspects of our business, including commercialization of our products and development of our other product candidates.

Our future financial performance and our ability to sustain successful commercialization of our products and our ability to commercialize other product candidates that may receive regulatory approval will depend, in part, on our ability to manage any future growth effectively. In particular, as we continue to commercialize our products, we will need to support the training and ongoing activities of our sales force and will likely need to continue to expand the size of our employee base for managerial, operational, financial and other resources. To that end, we must be able to successfully:

- manage our development efforts effectively;
- integrate additional management, administrative and manufacturing personnel;
- further develop our marketing and sales organization; and
- maintain sufficient administrative, accounting and management information systems and controls.

We may not be able to accomplish these tasks or successfully manage our operations and, accordingly, may not achieve our research, development, and commercialization goals. Our failure to accomplish any of these goals, including as a result of business or other interruptions resulting from the potential future impacts of the COVID-19 pandemic, if any, could adversely affect our business and operations.

There is a high risk that drug discovery and development efforts might not generate successful product candidates.

At the present time, a significant portion of our operations are focused on various stages of drug identification and development. We currently have various product candidates in the clinical testing stage. In our industry, it is statistically unlikely that the limited number of compounds that we have identified as potential product candidates will actually lead to successful product development efforts. We have invested a significant portion of our efforts and financial resources into the development of fostamatinib. Our ability to generate product revenue, which will not occur until after regulatory approval, if ever, will depend on the successful development, regulatory approval and eventual commercialization of one of our product candidates.

Our compounds in clinical trials and our future leads for potential drug compounds are subject to the risks and failures inherent in the development of pharmaceutical products. These risks include, but are not limited to, the inherent difficulty in selecting the right drug and drug target and avoiding unwanted side effects, as well as unanticipated problems relating to product development, testing, enrollment, obtaining regulatory approvals, obtaining and maintaining reimbursement in national markets and positive recommendation from HTA bodies, maintaining regulatory compliance, manufacturing, competition and costs and expenses that may exceed current estimates. In future clinical

trials, we or our partners may discover additional side effects and/or a higher frequency of side effects than those observed in previously completed clinical trials. The results of preliminary and mid-stage clinical trials do not necessarily predict clinical or commercial success, and larger later-stage clinical trials may fail to confirm the results observed in the previous clinical trials. Similarly, a clinical trial may show that a product candidate is safe and effective for certain patient populations in a particular indication, but other clinical trials may fail to confirm those results in a subset of that population or in a different patient population, which may limit the potential market for that product candidate. With respect to our own compounds in development, we have established anticipated timelines with respect to the initiation of clinical trials based on existing knowledge of the compounds. However, we cannot provide assurance that we will meet any of these timelines for clinical development. Additionally, the initial results of a completed earlier clinical trial of a product candidate do not necessarily predict final results and the results may not be repeated in later clinical trials.

Because of the uncertainty of whether the accumulated preclinical evidence (PK, pharmacodynamic, safety and/or other factors) or early clinical results will be observed in later clinical trials, we can make no assurances regarding the likely results from our future clinical trials or the impact of those results on our business. For example, we initiated our FORWARD study, a Phase 3 pivotal trial of fostamatinib in patients with wAIHA in March 2019, completed the enrollment in November 2021 and completed the treatment period for the last patient under the trial in April 2022. In June 2022, we announced top-line efficacy and safety data results of our FORWARD study, and the results of the trial did not demonstrate statistical significance in the primary efficacy endpoint of durable hemoglobin response in the overall study population. We conducted an in-depth analysis of these data to better understand differences in patient characteristics and outcomes and submitted these findings to the FDA. In October 2022, we announced that we received guidance from the FDA's review of these findings. Based on the result of the trial and the guidance from the FDA, we did not file an sNDA for this indication. Further, we have our Phase 3 clinical trial to evaluate safety and efficacy of fostamatinib in hospitalized COVID-19 patients which we launched in November 2020. In July 2022, we completed the enrollment on this trial, and on November 1, 2022, we announced the top-line results of the clinical trial. The trial approached but did not meet statistical significance in the primary efficacy endpoint. All prespecified secondary endpoints in the trial numerically favored fostamatinib over placebo, including mortality, time to sustained recovery, change in ordinal scale assessment, and number of days in the ICU. We are evaluating the opportunity and discussing next steps with the FDA and in collaboration with our partner, the US Department of Defense.

If the results of our clinical trials fail to meet the primary efficacy endpoints, or otherwise do not ultimately meet the requirements for an NDA approval by the FDA, the commercial prospects of our business may be harmed, our ability to generate product revenues may be delayed or eliminated or we may be forced to undertake other strategic alternatives that are in our shareholders' best interests, including cost reduction measures. If we are unable to obtain adequate financing or engage in a strategic transaction on commercially reasonable terms or at all, we may be required to implement further cost reduction strategies which could significantly impact activities related to our commercial efforts and/or research and development of our future product candidates, and could significantly harm our business, financial condition and results of operations. In addition, these cost reduction strategies could cause us to further curtail our operations or take other actions that would adversely impact our shareholders.

We are subject to federal and state healthcare fraud and abuse laws, false claims laws and other federal and state healthcare laws, and the failure to comply with such laws could result in substantial penalties. Our employees, independent contractors, consultants, principal investigators, CROs, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

Our business operations and current and future arrangements with investigators, healthcare professionals, consultants, third-party payors and customers, may expose us to broadly applicable federal, state and foreign fraud and abuse and other healthcare laws and regulations including anti-kickback and false claims laws, data privacy and security laws, and transparency reporting laws. These laws may constrain the business or financial arrangements and relationships through which we conduct our operations, including how we research, market, sell and distribute any product for which we have obtained regulatory approval, or for which we obtain regulatory approval in the future. 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 intended to prevent fraud, misconduct, bribery kickbacks, self-dealing and other abusive or inappropriate practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, including promoting off-label uses of our products, commission compensation, certain customer incentive programs, certain patient support offerings, and other business

arrangements generally. Activities subject to these laws also involve the improper use or misrepresentation of information obtained in the course of patient recruitment for clinical trials, creating fraudulent data in our preclinical studies or clinical trials or illegal misappropriation of drug product, which could result in regulatory sanctions and cause serious harm to our reputation. See "Part I, Item 1, Business – Government Regulation – Healthcare and Privacy Law and Regulation and Healthcare Reform" of our Annual Report on Form 10-K for the year ended December 31, 2022, for more information on the healthcare laws and regulations that may affect our ability to operate.

We are also exposed to the risk of fraud, misconduct or other illegal activity by our employees, independent contractors, consultants, principal investigators, CROs, commercial partners 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 federal and state data privacy, security, fraud and abuse and other healthcare laws and regulations in the US and similar foreign fraudulent misconduct laws; or report financial information or data accurately or to disclose unauthorized activities to us. It is not always possible to identify and deter employee misconduct, 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 be in compliance with such laws or regulations.

We are also subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. Efforts to ensure that our business arrangements will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties, damages, disgorgement, monetary fines, imprisonment, additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

We are subject to stringent and evolving privacy and information security laws, regulations, rules, policies, and contractual obligations, and changes in such laws, regulations, rules, policies, contractual obligations and our actual or perceived failure to comply with such requirements could subject us to significant investigations, fines, penalties and claims, any of which may have a material adverse effect on our business, financial condition, results of operations or prospects.

We are subject to, or affected by, various federal, state and foreign laws, rules, directives, and regulations, as well as regulatory guidance, policies and contractual obligations relating to privacy and information security, governing the acquisition, collection, access, use, disclosure, processing, modification, retention, storage, transfer, destruction, protection, and security (collectively, "processing") of personal information and other sensitive information about individuals. The global privacy and information security landscape is evolving rapidly, and implementation standards and enforcement practices are likely to continue to develop for the foreseeable future and may result in conflicting or inconsistent compliance obligations. Legislators and regulators are increasingly adopting or amending privacy and information security laws, rules, directives, and regulations that may create uncertainty in our business, affect our or our collaborators', service providers' and contractors' ability to operate in certain jurisdictions or to process personal information, transfer data internationally, necessitate the acceptance of more onerous obligations in our contracts, result in enforcement actions, litigation or other liability or impose additional costs on us. The cost of compliance with these laws, regulations and standards is high and is likely to increase in the future. Any failure or perceived failure by us or our collaborators, service providers and contractors to comply with federal, state or foreign laws or regulations, our internal policies and procedures or our contracts governing the processing of personal information could result in negative publicity, diversion of management time and effort and proceedings against us by governmental entities or others. In many jurisdictions, enforcement actions, litigation, and other consequences for noncompliance with privacy and information security laws and regulations are rising. Compliance with applicable privacy and information security laws and regulations, as well as regulatory guidance, policies and contractual obligations, is a rigorous and time-intensive

process, and we may be required to put in place additional mechanisms to ensure compliance with the new privacy and information security requirements. If we fail to comply with any such obligations, we may face significant investigations, fines, penalties and claims that could materially and adversely affect our business, financial condition, results of operations, ability to process personal information and income from certain business initiatives.

In the US, these obligations include various federal, state, and local statutes, rules, and regulations relating to privacy and data security. The Federal Trade Commission (FTC) has authority under Section 5 of the FTC Act to regulate unfair or deceptive or practices, and has used this authority to initiate enforcement actions against companies that implement inadequate controls around privacy and information security in violation of their externally facing policies. The US federal government has also enacted statutes to address privacy and information security issues impacting particular industries or activities, including the following laws and regulations: the Electronic Communications Privacy Act, the Computer Fraud and Abuse Act, the Health Insurance Portability and Accountability Act, the Health Information Technology for Economic and Clinical Health Act, the Telephone Consumer Protection Act, the CAN-SPAM Act, and other laws and regulations. In addition, state legislatures have enacted statutes to address privacy and information security issues, including the California Consumer Privacy Act of 2018 (the CCPA), and similar state laws such as Virginia's Consumer Data Protection Act and the Colorado Privacy Act. For example, the CCPA establishes a privacy framework applicable to for-profit entities that are doing business in California, including an expansive definition of personal information and data privacy rights for California residents, and authorizes potentially severe statutory damages and creates a private right of action for certain data security breaches. The CCPA also requires businesses subject to the law to provide new disclosures to California residents and to provide them with expanded rights with respect to their personal information, including the right to opt out of the sale of such information. Although there are limited exemptions for clinical trial and other research-related data under the CCPA, the CCPA and other similar laws could impact our business depending on how it will be interpreted by the new California Privacy Protection Agency. As we expand our operations, the CCPA may increase our compliance costs and potential liability. In addition, California voters approved the California Privacy Rights Act of 2020 (CPRA), which goes into effect on January 1, 2023. The CPRA will, among other things, give California residents the ability to limit the use of their sensitive information, opt out of certain types of profiling and automated processing activities, provide for penalties for CPRA violations concerning California residents under the age of 16, and establish a new California Privacy Protection Agency to implement and enforce the law. Additionally, Colorado and Virginia both signed privacy legislation, each of which go into effect in 2023, and multiple other states and the federal government are considering enacting similar legislation. Many states also have in place data security laws requiring companies to maintain certain safeguards with respect to the processing of personal information, and all states require companies to notify individuals or government regulators in the event of a data breach impacting such information. New privacy laws add additional complexity, requirements, restrictions and potential legal risk. Accordingly, compliance programs may require additional investment in resources, and could impact availability of previously useful data.

Internationally, our operations abroad may also be subject to increased scrutiny or attention from foreign data protection authorities. For example, our clinical trial programs and research collaborations outside the US may implicate foreign data protection laws, including in the European Economic Area, Switzerland, and/or the UK (collectively, Europe). Many jurisdictions have established or are in the process of establishing privacy and data security legal frameworks with which we, our collaborators, service providers, including our CROs, and contractors must comply. For example, European data protection laws, including, without limitation, the General Data Protection Regulation (the EU GDPR), impose strict requirements for processing personal information (i.e., data which identifies an individual or from which an individual is identifiable), including clinical trial data and grant individuals' various data protection rights (e.g., the right to erasure of personal information). In turn, the EU GDPR and similar laws increase our obligations with respect to clinical trials conducted in Europe by expanding the definition of personal information to also include coded data and requiring (i) changes to informed consent practices and more detailed notices for clinical trial participants and investigators; (ii) consideration of data protection as any new products or services are developed, including to limit the amount of personal information processed; and (iii) implementation of appropriate technical and organizational measures to safeguard personal information and to report certain personal data breaches to the relevant supervisory authority without undue delay (for the EU GDPR no later than 72 hours where feasible). In the event of non-compliance, the EU GDPR provides for robust regulatory enforcement and fines of up to €20 million or 4% of the annual global revenue, whichever is greater. In addition, the EU GDPR confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies and obtain compensation for damages resulting from violations of the EU GDPR.

European data protection laws, including the EU GDPR, generally also restrict the transfer of personal information from Europe to the US and most other countries that are not recognized as having "adequate" data protection laws unless the parties to the transfer have implemented specific safeguards to protect the transferred personal information. One of the primary safeguards allowing US companies to import personal information from Europe has been certification to the EU-US Privacy Shield and Swiss-US Privacy Shield frameworks administered by the US Department of Commerce. However, the Court of Justice of the European Union (CJEU) issued a decision in July 2020 invalidating the EU-US Privacy Shield framework as a data transfer mechanism (*Schrems II*) and imposing further restrictions on the use of standard contractual clauses (SCCs), including a requirement for companies to carry out a transfer privacy impact assessment, which, among other things, assesses laws governing access to personal information in the recipient country and considers whether supplementary measures that provide privacy protections additional to those provided under the SCCs will need to be implemented to ensure an essentially equivalent level of data protection to that afforded in Europe. Following that decision, the Swiss Federal Data Protection and Information Commissioner (FDPIC) took a similar view and considered that data transfers based on the Swiss-US Privacy Shield framework are no longer lawful (despite the fact that *Schrems II* is not directly applicable in Switzerland (unless the Swiss based company is subject to the EU GDPR) and the Swiss-US Privacy Shield has not been officially invalidated). Further, the EC published new EU SCCs in June 2022, which place onerous obligations on the contracting parties. At present, there are few, if any, viable alternatives to the SCCs. However, on October 7, 2022, the US President introduced an Executive Order to facilitate a new Trans-Atlantic Data Privacy Framework which will act as a successor to the invalidated Privacy Shield. On December 13, 2022, the EC also published its draft adequacy decision to reflect its view that the new executive order and Trans-Atlantic Data Privacy Framework, is able to meet the concerns raised in *Schrems II*. If the draft adequacy decision is approved and implemented, the agreement will facilitate the transatlantic flow of personal data and provide additional safeguards to data transfer mechanisms (including EU SCCs and Binding Corporate Rules) for companies transferring personal data from the EU to the US. However, before parties rely on the new framework, there are still legislative and regulatory steps that must be undertaken both in the US and in the EU. As such, any transfers by us or our third-party vendors, collaborators or others of personal information from Europe to the US or elsewhere may not comply with European data protection laws, may increase our exposure to European data protection laws' heightened sanctions for cross-border data transfer restrictions may restrict our clinical trial activities in Europe and may limit our ability to collaborate with CROs, service providers, contractors and other companies subject to European data protection laws. Loss of our ability to transfer personal information from Europe may also require us to increase our data processing capabilities in those jurisdictions at significant expense.

Following the UK's departure from the EU (Brexit), the EU GDPR's data protection obligations continue to apply to the UK in substantially unvaried form under the so-called "UK GDPR" (i.e., the EU GDPR as it continues to form part of law in the UK by virtue of section 3 of the European Union (Withdrawal) Act 2018, as amended (including by the various Data Protection, Privacy and Electronic Communications (Amendments etc.) (EU Exit) Regulations)). The UK GDPR exists alongside the UK Data Protection Act 2018 that implements certain derogations in the UK GDPR into UK law. Under the UK GDPR, companies not established in the UK but that process personal information either in relation to the offering of goods or services to individuals in the UK, or to monitor their behavior will be subject to the UK GDPR, the requirements of which are (at this time) largely aligned with those under the EU GDPR, and as such, may lead to similar compliance and operational costs with potential fines of up to £17.5 million or 4% of global turnover. As a result, we are potentially exposed to two parallel data protection regimes, each of which authorizes fines and the potential for divergent enforcement actions. It should also be noted that the UK Government published its own form of EU SCCs, known as the International Data Transfer Agreement (IDTA) and International Data Transfer Addendum (UK Addendum) to the new EU SCCs. The UK Information Commissioner's Office (ICO) has also published its version of the transfer impact assessment and revised guidance on international transfers, although entities may choose to adopt either the EU or UK style transfer impact assessment. In terms of international data transfers between the UK and US, it is understood that the UK and the US are negotiating an adequacy agreement.

Additionally, other countries outside of Europe have enacted or are considering enacting similar cross-border data transfer restrictions and laws requiring local data residency, with strict requirements and limitations for processing personal information, which could increase the cost and complexity of delivering our services and operating our business. For example, Brazil enacted the General Data Protection Law, New Zealand enacted the New Zealand Privacy Act, China released its Personal Information Protection Law, which went into effect November 1, 2021, and Canada introduced the Digital Charter Implementation Act. As with the EU GDPR, these laws are broad and may increase our compliance burdens, including by mandating potentially burdensome documentation requirements and granting certain rights to individuals to control how we collect, use, disclose, retain, and process personal information about them.

We publish privacy policies and other documentation regarding our collection, processing, use and disclosure of personal information and/or other confidential information. Although we endeavor to comply with our published policies and other documentation, we may at times fail to do so or may be perceived to have failed to do so. Moreover, despite our efforts, we may not be successful in achieving compliance if our employees, collaborators, contractors, service providers or vendors fail to act in accordance with our published policies and documentation. Such failures can subject us to potential foreign, local, state and federal action if they are found to be deceptive, unfair, or misrepresentative of our actual practices. Moreover, trial participants or research subjects about whom we or our partners obtain information, as well as the providers who share this information with us, may contractually limit our ability to use and disclose the information or exercise their right to do so under applicable privacy legislation. Claims that we have violated individuals' privacy rights or failed to comply with data protection laws or applicable privacy policies and documentation, even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

In addition to data privacy requirements, many jurisdictions impose mandatory clinical trial information obligations on sponsors. In the EU, such obligations arise under the Transparency Regulation No 1049/ 2001, EMA Policy 0043, EMA Policy 0070 and the Clinical Trials Regulation No 536/2014, all of which impose on sponsors the obligation to make publicly available certain information stemming from clinical studies. In the EU, the transparency framework provides EU-based parties the right to submit an access to documents request to the EMA for information included in the marketing authorization application dossier for approved medicinal products. Only very limited information is exempted from disclosure, i.e. commercially confidential information (which is construed increasingly narrowly) and protected personal data. It is possible for competitors to access and use this data in their own research and development programs anywhere in the world, once this data is in the public domain.

On May 3, 2022, the EC published a proposal for a regulation on the European Health Data Space (EHDS), which aims to further enable exchange of electronic health data both for primary use (among national EU healthcare systems for patient care) and secondary use (among private companies and regulators to enable scientific research). Whilst the regulation is currently under discussions among the EU legislators, the text is expected to be finalized by the end of 2023 and for the EHDS to become applicable in 2025. This will impose new obligations, but also create opportunities, for entities engaged in health-related research to share and access health data on a scale much larger than what is foreseen under current applicable transparency provisions.

Our business could be materially and adversely affected by pandemics as a result of their potential impacts on our sales force and commercialization efforts, supply chain, regulatory, clinical development and corporate development activities and other business operations, in addition to the impact of a global economic slowdown.

Pandemics may result in extended travel and other restrictions in order to reduce the spread of diseases. Government measures taken in response to pandemics could have a significant impact, both direct and indirect, on our business and commerce, as significant reductions in business related activities may occur, supply chains may be disrupted, and manufacturing and clinical development activities may be curtailed or suspended.

For example, due to the effects of the COVID-19 pandemic, we have observed reduced patient-doctor interactions and our representatives have had fewer visits with health care providers, which has negatively affected our product sales and may continue to negatively affect our product sales in the future. Physicians with practices severely impacted by the COVID-19 pandemic, and who currently prescribe our products, may eventually decide to close their independent practices and join a larger medical organization with a practice that does not prescribe our products. Additionally, commercial-related activities, such as our marketing programs, speaker bureaus, and market access initiatives were conducted virtually, delayed or cancelled as a result of the COVID-19 pandemic. We had to deploy resources to enable our field-based employees to continue to engage with health care providers in hybrid virtual and in-person interactions.

With respect to clinical development, in response to the COVID-19 pandemic, we have taken, and may continue to take, measures to implement remote and virtual approaches, including remote patient monitoring where possible and working with our investigators for appropriate care of these patients in a safe manner. Due to the effects of COVID-19 pandemic, we experienced a number of our clinical trial investigators have paused, postponed or delayed new patient enrollment and restricted site visits of existing patients enrolled. Although some sites have resumed patient

screening, and we may continue to experience delays in new patient enrollment in the future. We are continuing to make decisions country-by-country to minimize risk to the patients and clinical trial sites. We also rely heavily on our clinical trial investigators to inform us of the best course of action with respect to resuming enrollment/screening, considering the ability of sites to ensure patient safety or data integrity. Patients already enrolled in our studies continue to receive study drugs, and we remain focused on supporting our sites in providing care for these patients and providing continued investigational drug supply. We experienced slower than anticipated enrollment in some of our clinical trials, and in the future, we may experience adverse impact that the COVID-19 pandemic may have on our clinical trials, including the timing thereof, or our ability to continue to treat patients enrolled in our trials, enroll and assess new patients, supply study drugs and obtain complete data points in accordance with study protocol.

Pandemics may cause significant disruption in the supply chain for our commercial products. We currently rely on third parties to, among other things, manufacture and ship our commercial product, raw materials and product supply for our clinical trials, perform quality testing and supply other goods and services to help manage our commercial activities, our clinical trials and our operations in the ordinary course of business. While we have engaged actively with various elements of our supply chain and distribution channel, including our customers, contract manufacturers, and logistics and transportation provider to meet demand for our products and to remain informed of any challenges within our supply chain, we may face disruptions to our supply chain and operations, and associated delays in the manufacturing and supply of our products. Such supply disruptions would adversely impact our ability to generate sales of and revenues from our products and our business, financial condition, results of operations and growth prospects could be adversely affected.

Pandemics may affect our collaboration and licensing partners for the commercialization of fostamatinib globally, as well as our ability to advance our various clinical stage programs. We cannot predict the impact of such disruptions on our partners' ability to advance commercialization of fostamatinib in the market and the timing of enrollment and completion of various clinical trials being conducted by our collaboration partners.

Health regulatory agencies globally may experience prolonged disruptions in their operations as a result of pandemics. For example, in response to the COVID-19 pandemic, the FDA delayed inspections and evaluations of certain drug manufacturing facilities and clinical research sites We cannot predict whether, and when, health regulatory agencies will decide to pause or resume inspections due to pandemics. Any de-prioritization of our clinical trials or delay in regulatory review resulting from such disruptions could materially affect the completion of our clinical trials.

In addition, as seen in the COVID-19 pandemic, pandemics could result in a significant disruption of global financial markets. We could experience an inability to access additional capital or an impact on liquidity, which could in the future negatively affect our capacity for certain corporate development transactions or our ability to make other important, opportunistic investments, or we may not be able to meet the requirements under our Credit Agreement with MidCap. While we expect pandemics to adversely affect our business, financial condition, results of operations and growth prospects in the future periods, the extent of the impact on our ability to generate sales of and revenues from our approved products, our ability to continue to secure new collaborations and support existing collaboration efforts with our partners, our clinical development and regulatory efforts, our corporate development objectives and the value of and market for our common stock, will depend on future circumstances that are highly uncertain and cannot be predicted with confidence at this time, such as the ultimate duration and severity of pandemics, travel restrictions, quarantines, social distancing and business closure requirements in the US and other countries, and the effectiveness of actions taken globally to contain and treat diseases. To the extent pandemics adversely affect our business and results of operations, it may also have the effect of heightening many of the other risks and uncertainties described elsewhere in this "Risk Factors" section.

Enhanced governmental and public scrutiny over, or investigations or litigation involving, pharmaceutical manufacturer donations to patient assistance programs may require us to modify our programs and could negatively impact our business practices, harm our reputation, divert the attention of management and increase our expenses.

To help patients afford our products, we have a manufacturer-sponsored patient assistance program that helps financially needy patients. This type of program has become the subject of enforcement scrutiny in recent years. For example, some pharmaceutical manufacturers have been named in class action lawsuits challenging the legality of their patient assistance programs under a variety of federal and state laws. In addition, certain state and federal enforcement

authorities have pursued investigations and settlements and members of Congress have initiated inquiries about manufacturer-sponsored patient support programs, including, for example, manufacturer-sponsored patient assistance programs, co-payment assistance programs, and manufacturer contributions to independent charitable patient assistance programs. Moreover, the Department of Health and Human Services, Office of the Inspector General continues to publish advisory opinions and other agency guidance on the topic of patient assistance, which reflects the government's continued scrutiny of manufacturer sponsored or supported patient assistance programs. Numerous organizations, including pharmaceutical manufacturers, have been subject to ongoing litigation, enforcement activities and settlements related to their patient support programs and certain of these organizations have entered into, or have otherwise agreed to, significant civil settlements with applicable enforcement authorities. It is possible that future legislation may be proposed that would establish requirements or restrictions with respect to these programs and/or support that would affect pharmaceutical manufacturers.

Our patient assistance program could become the target of similar inquiries, litigation, enforcement, and/or legislative proposals. If we are deemed not to have complied with laws or regulations in the operation of, or our interactions with, these programs, we could be subject to damages, fines, penalties or other criminal, civil or administrative sanctions or enforcement actions. We cannot ensure that our compliance controls, policies and procedures will be sufficient to protect against acts of our employees, business partners or vendors that may violate the laws or regulations of the jurisdictions in which we operate. A government investigation could negatively impact our business practices, harm our reputation, divert the attention of management and increase our expenses.

If manufacturers obtain approval for generic versions of our products, or of products with which we compete, our business may be harmed.

Under the FDCA, the FDA can approve an ANDA for a generic version of a branded drug without the ANDA applicant undertaking the clinical testing necessary to obtain approval to market a new drug. Generally, in place of such clinical studies, an ANDA applicant usually needs only to submit data demonstrating that its product has the same active ingredient(s), strength, dosage form and route of administration and that it is bioequivalent to the branded product. In September 2019, the FDA published product-specific bioequivalence guidance on fostamatinib disodium to let potential ANDA applicants understand the data FDA would expect to see for approval of a generic version of our products.

The FDCA requires that an applicant for approval of a generic form of a branded drug certify either that its generic product does not infringe any of the patents listed by the owner of the branded drug in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations (referred to as the "Orange Book") or that those patents are not enforceable. This process is known as a paragraph IV challenge. Upon notice of a paragraph IV challenge, a patent owner has 45 days to bring a patent infringement suit in federal district court against the company seeking ANDA approval of a product covered by one of the owner's patents. If this type of suit is commenced, the FDCA provides a 30-month stay on the FDA's approval of the competitor's application. If the litigation is resolved in favor of the ANDA applicant or the challenged patent expires during the 30-month stay period, the stay is lifted, and the FDA may thereafter approve the application based on the standards for approval of ANDAs. Once an ANDA is approved by the FDA, the generic manufacturer may market and sell the generic form of the branded drug in competition with the branded medicine.

The ANDA process can result in generic competition if the patents at issue are not upheld or if the generic competitor is found not to infringe the owner's patents. If this were to occur with respect to our products or products with which it competes, our business would be harmed. We have a number of patents listed in the Orange Book, the last of which is expected to expire in July 2032.

In June 2022, we received a notice letter regarding an ANDA submitted to the FDA by Annora, requesting approval to market a generic version of TAVALISSE. The notice letter included a Paragraph IV certification with respect to our US Patent Nos. 7,449,458; 8,263,122; 8,652,492; 8,771,648 and 8,951,504, which are listed in the Orange Book. The notice letter asserts that these patents will not be infringed by Annora's proposed product, are invalid and/or are unenforceable. Annora's notice letter does not provide a Paragraph IV certification against our other patents listed in the Orange Book. On July 25, 2022, we filed a lawsuit in the US District Court for the District of New Jersey against Annora and its affiliates, Hetero Labs Ltd., and Hetero USA, Inc., for infringement of our US patents identified in Annora's Paragraph IV certification. On September 21, 2022, Annora and its affiliates answered and counterclaimed for

declaratory judgment of non-infringement and invalidity of the ’458, ’122, ’492, ’648, and ’504 patents. We filed an answer to Annora’s counterclaims on October 12, 2022. Annora served invalidity and non-infringement contentions on December 31, 2022. We filed an answer to Annora’s invalidity and non-infringement contentions in March 2023. We intend to vigorously enforce and defend our intellectual property related to TAVALISSE. We cannot be assured that such lawsuit will prevent the introduction of a generic version of TAVALISSE for any particular length of time, or at all. If an ANDA from Annora or any other generic manufacturer is approved, and a generic version of TAVALISSE is introduced, whether following the expiration of our patents, the invalidation of our patents as a result of any litigation, or the determination that the proposed generic product does not infringe on our patents, our sales of TAVALISSE would be adversely affected. In addition, we cannot predict what additional ANDAs could be filed by Annora or other potential generic competitors requesting approval to market generic forms of fostamatinib, which would require us to incur significant additional expense and result in distraction for our management team, and if approved, result in significant decreases in the revenue derived from sales of our marketed products and thereby materially harm our business and financial condition.

Unforeseen safety issues could emerge with our products that could require us to change the prescribing information to add warnings, limit use of the product, and/or result in litigation. Any of these events could have a negative impact on our business.

Discovery of unforeseen safety problems or increased focus on a known problem could impact our ability to commercialize our products and could result in restrictions on its permissible uses, including withdrawal of the medicine from the market.

If we or others identify additional undesirable side effects caused by our products after approval:

- regulatory authorities may require the addition of labeling statements, specific warnings, contraindications, or field alerts to physicians and pharmacies;
- regulatory authorities may withdraw their approval of the product and require us to take our approved drugs off the market;
- we may be required to change the way the product is administered, conduct additional clinical trials, change the labeling of the product, or implement a Risk Evaluation and Mitigation Strategy (REMS);
- we may have limitations on how we promote our drugs;
- third-party payors may limit coverage or reimbursement for our products;
- sales of our products may decrease significantly;
- we may be subject to litigation or product liability claims; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of our products and could substantially increase our operating costs and expenses, which in turn could delay or prevent us from generating significant revenue from sale of our products.

Side effects and toxicities associated with our products, as well as the warnings, precautions and requirements listed in the prescribing information for our products, could affect the willingness of physicians to prescribe, and patients to utilize, our products and thus harm commercial sales of our products. The FDA approved label for REZLIDHIA contains a boxed warning describing the risk of differentiation syndrome, which can be fatal, in patients receiving REZLIDHIA. This and other restrictions could limit the commercial success of REZLIDHIA.

If a safety issue emerges post-approval, we may become subject to costly product liability litigation by our customers, their patients or payors. Product liability claims could divert management’s attention from our core business, be expensive to defend, and result in sizable damage awards against us that may not be covered by insurance. If we cannot successfully defend ourselves against claims that our products caused injuries, we will incur substantial liabilities.

Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we may develop;
- the inability to commercialize any products that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of patients from clinical studies or cancellation of studies;
- significant costs to defend the related litigation;
- substantial monetary awards to patients; and
- loss of revenue.

We currently hold $10.0 million in product liability insurance coverage, which may not be adequate to cover all liabilities that we may incur. Insurance coverage is increasingly expensive. We may not be able to obtain insurance coverage at a reasonable cost or in amounts adequate to satisfy any liability or associated costs that may arise in the future. These events could harm our business and results of operations and cause our stock price to decline.

If we fail to comply with our reporting and payment obligations under the Medicaid Drug Rebate Program or other governmental pricing programs in the US, we could be subject to additional rebate or discount requirements, fines, sanctions and exposure under other laws which could have an adverse effect on our business, results of operations and financial condition.

We participate in the Medicaid Drug Rebate Program, as administered by the Centers for Medicare and Medicaid Services (CMS), the 340B Drug Pricing Program, and other federal and state government drug pricing programs in the US, and we may participate in additional government pricing programs in the future. These programs generally require us to pay rebates or otherwise provide discounts to government payors in connection with drugs that are dispensed to beneficiaries/recipients of these programs. In some cases, such as with the Medicaid Drug Rebate Program, the rebates are based on pricing metrics that we report on a monthly and quarterly basis to the government agencies that administer the programs. Pricing requirements and rebate/discount calculations are complex, vary among products and programs, and are often subject to interpretation by governmental or regulatory agencies and the courts. The requirements of these programs, including, by way of example, their respective terms and scope, change frequently. Responding to current and future changes may increase our costs, and the complexity of compliance will be time consuming. Invoicing for rebates is provided in arrears, and there is frequently a time lag of up to several months between the sales to which rebate notices relate and our receipt of those notices, which further complicates our ability to accurately estimate and accrue for rebates related to the Medicaid program as implemented by individual states. Thus, there can be no assurance that we will be able to identify all factors that may cause our discount and rebate payment obligations to vary from period to period, and our actual results may differ significantly from our estimated allowances for discounts and rebates. Changes in estimates and assumptions may have an adverse effect on our business, results of operations and financial condition.

In addition, the Office of Inspector General of Human and Health Services (HHS) and other Congressional enforcement and administrative bodies have increased their focus on pricing requirements for products, including, but not limited to the methodologies used by manufacturers to calculate average manufacturer price and best price for compliance with reporting requirements under the Medicaid Drug Rebate Program. We are liable for errors associated with our submission of pricing data and for any overcharging of government payors. Failure to make necessary disclosures and/or to identify overpayments could result in allegations against us under the federal False Claims Act and other laws and regulations. Any required refunds to the US government or response to a government investigation or enforcement action would be expensive and time consuming and could have an adverse effect on our business, results of operations and financial condition. In addition, in the event that CMS were to terminate our rebate agreement, no federal payments would be available under Medicaid for our covered outpatient drugs or under Medicare Part B for any of our products that may be reimbursed under Part B.

Even for those product candidates that have or may receive regulatory approval, they may fail to achieve the degree of market acceptance by physicians, patients, healthcare payors and others in the medical community necessary for commercial success, in which case we may not generate significant revenues or become profitable.

For our product candidates that have or may receive regulatory approval, they may nonetheless fail to gain sufficient market acceptance by physicians, hospital administrators, patients, healthcare payors and others in the medical community. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including the following:

- relative convenience and ease of administration;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the willingness of physicians to change their current treatment practices;
- the willingness of hospitals and hospital systems to include our product candidates as treatment options;
- demonstration of efficacy and safety in clinical trials;
- the prevalence and severity of any side effects;
- the ability to offer product candidates for sale at competitive prices;
- the price we charge for our product candidates;
- the strength of marketing and distribution support; and
- the availability of third-party coverage and adequate reimbursement and the willingness of patients to pay out-of-pocket in the absence of such coverage and adequate reimbursement.

Efforts to educate the physicians, patients, healthcare payors and others in the medical community on the benefits of our product candidates may require significant resources and may not be successful. If any of our product candidates are approved, but do not achieve an adequate level of acceptance, we may not generate significant product revenue and we may not become profitable on a sustained basis.

We will need additional capital in the future to sufficiently fund our operations and research.

We have consumed substantial amounts of capital to date as we continue our research and development activities, including preclinical studies and clinical trials and for the commercialization of our products. We may seek another collaborator or licensee in the future for further clinical development and commercialization of fostamatinib, as well as our other clinical programs, which we may not be able to obtain on commercially reasonable terms or at all. We believe that our existing capital resources will be sufficient to support our current and projected funding requirements, including the continued commercialization of our products through at least the next 12 months. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with commercial launch, the development of our product candidates and other research and development activities, we are unable to estimate with certainty our future product revenues, our revenues from our current and future collaborative partners, the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials and other research and development activities.

We will continue to need additional capital and the amount of future capital needed will depend largely on the success of our commercialization of our products, and the success of our internally developed programs as they proceed in later and more expensive clinical trials, including any additional clinical trials that we may decide to conduct with respect to fostamatinib. While we intend to opportunistically seek access to additional funds through public or private equity offerings or debt financings, we do not know whether additional financing will be available when needed, or that, if available, we will obtain financing on reasonable terms. Our ability to raise additional capital, including our ability to secure new collaborations and continue to support existing collaboration efforts with our partners, may also be adversely

impacted by potential worsening global economic conditions and the recent disruptions to, and volatility in, the credit and financial markets in the US and worldwide resulting from the COVID-19 pandemic and the conflict in Russia and Ukraine. Unless and until we are able to generate a sufficient amount of product, royalty or milestone revenue, which may never occur, we expect to finance future cash needs through public and/or private offerings of equity securities, debt financings or collaboration and licensing arrangements, as well as through proceeds from the exercise of stock options and interest income earned on the investment of our cash balances and short-term investments. To the extent we raise additional capital by issuing equity securities in the future, our stockholders could at that time experience substantial dilution. In addition, we have a significant number of stock options outstanding. To the extent that outstanding stock options have been or may be exercised or other shares issued, our stockholders may experience further dilution. Further, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. Our credit facility with MidCap includes certain covenants that may restrict our business, and any other debt financing that we are able to obtain in the future may involve operating covenants that restrict our business. To the extent that we raise additional funds through any new collaboration and licensing arrangements, we may be required to refund certain payments made to us, relinquish some rights to our technologies or product candidates or grant licenses on terms that are not favorable to us.

We have indebtedness in the form of a term loan pursuant to the Credit Agreement (as defined below) with MidCap, which could adversely affect our financial condition and our ability to respond to changes in our business. Further, if we are unable to satisfy certain conditions of the Credit Agreement, we will be unable to draw down the remainder of the facility.*

We entered into the Credit Agreement with MidCap on September 27, 2019, amended on March 29, 2021, February 11, 2022, and July 27, 2022. The Credit Agreement provides for a $60.0 million term loan credit facility. As of March 31, 2023, the outstanding principal balance of the loan was $60.0 million, and no remaining funds available under the term loan credit facility. Under the Credit Agreement, we are required to repay amounts due when there is an event of default for the term loans that results in the principal, premium, if any, and interest, if any, becoming due prior to the maturity date for the term loans. The Credit Agreement also contains a number of other affirmative and restrictive covenants. See "Note 9 – Debt" to our "Notes to Condensed Financial Statements" contained in Part I, Item 1 of this Quarterly Report on Form 10-Q for additional details of the Credit Agreement. These and other terms in the Credit Agreement have to be monitored closely for compliance and could restrict our ability to grow our business or enter into transactions that we believe would be beneficial to our business. Our business may not generate cash flow from operations in the future sufficient to service our debt and support our growth strategies. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as restructuring our debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness 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 current debt obligations. In addition, we cannot be sure that additional financing will be available when required or, if available, will be on terms satisfactory to us. Further, even if we are able to obtain additional financing, we may be required to use such proceeds to repay a portion of our debt.

Our indebtedness may have other adverse effects, such as:

- our vulnerability to adverse general economic conditions and heightened competitive pressures;
- dedication of a portion of our cash flow from operations to interest payments, limiting the availability of cash for other operational purposes;
- limited flexibility in planning for, or reacting to, changes in our business and industry; and
- our inability to obtain additional financing in the future.

Our Credit Agreement with MidCap contains a mandatory prepayment provision that gives MidCap and/or its agent the right to demand payment of the outstanding principal and additional interest and fees in the event of default. We may not have enough available cash or be able to obtain financing at the time we are required to repay the term loan with additional interest and fees prior to maturity.

We rely and may continue to rely on two distribution facilities for the sale of our products and potential sale of any of our product candidates.

Our distribution operations for the sale of our products are currently concentrated in two distribution centers owned by a third-party logistics provider. Additionally, our distribution operations, if and when we launch any of our product candidates in the future, may also be concentrated in such distribution centers owned by a third-party logistics provider. Any errors in inventory level management and unforeseen inventory shortage could adversely affect our business. In addition, any significant disruption in the operation of the facility due to natural disaster or severe weather, or events such as fire, accidents, power outages, system failures, or other unforeseen causes, could devalue or damage a significant portion of our inventories and could adversely affect our product distribution and sales until such time as we could secure an alternative facility. Further, climate change may increase both the frequency and severity of extreme weather conditions and natural disasters, which may affect our business operations. If we encounter difficulties with any of our distribution facilities, whether due to the potential future impacts of the COVID-19 pandemic (including as a result of disruptions of global shipping and the transport of products) or otherwise, or other problems or disasters arise, we cannot ensure that critical systems and operations will be restored in a timely manner or at all, and this would have an adverse effect on our business. In addition, growth could require us to further expand our current facility, which could affect us adversely in ways that we cannot predict.

Forecasting potential sales for any of our product candidates will be difficult, and if our projections are inaccurate, our business may be harmed, and our stock price may be adversely affected.*

Our business planning requires us to forecast or make assumptions regarding product demand and revenues for any of our product candidates if they are approved despite numerous uncertainties. These uncertainties may be increased if we rely on our collaborators or other third parties to conduct commercial activities in certain geographies and provide us with accurate and timely information. Actual results may differ materially from projected results for various reasons, including the following, as well as risks identified in other risk factors:

- the efficacy and safety of any of our product candidates, including as relative to marketed products and product candidates in development by third parties;
- pricing (including discounting or other promotions), reimbursement, product returns or recalls, competition, labeling, adverse events and other items that impact commercialization;
- the rate of adoption in the particular market, including fluctuations in demand for various reasons;
- potential future impacts, if any, due to the COVID-19 pandemic;
- lack of patient and physician familiarity with the drug;
- lack of patient use and physician prescribing history;
- lack of commercialization experience with the drug;
- actual sales to patients may significantly differ from expectations based on sales to wholesalers; and
- uncertainty relating to when the drug may become commercially available to patients and rate of adoption in other territories.

We expect that our revenues from sales of any of our products will continue to be based in part on estimates, judgment and accounting policies. Any incorrect estimates or disagreements with regulators or others regarding such estimates or accounting policies may result in changes to our guidance, projections or previously reported results. We make estimates for provisions for sales discounts, returns and allowances. Our estimates are based on available customer and payer data receceived from the specialty pharmacies and distributors, as well as third party market research data. In part, our estimates are dependent on our distribution channel and payer mix. If actual results in the future vary from our estimates, we adjust these estimates, which would affect our net product revenue and earnings in the period such variances become known. Expected and actual product sales and quarterly and other results may greatly fluctuate, including in the near-term, and such fluctuations can adversely affect the price of our common stock, perceptions of our ability to forecast demand and revenues, and our ability to maintain and fund our operations.

We do not and will not have access to all information regarding fostamatinib and product candidates we licensed to Lilly, Kissei, Grifols, Medison and Knight.

We do not and will not have access to all information regarding fostamatinib and other product candidates, including potentially material information about commercialization plans, medical information strategies, clinical trial design and execution, safety reports from clinical trials, safety reports, regulatory affairs, process development, manufacturing and other areas known by Lilly, Kissei, Grifols, Medison and Knight. In addition, we have confidentiality obligations under our respective agreements with Lilly, Kissei, Grifols, Medison and Knight. Thus, our ability to keep our shareholders informed about the status of fostamatinib and other product candidates will be limited by the degree to which Lilly, Kissei, Grifols, Medison and/or Knight keep us informed and allows us to disclose such information to the public. If Lilly, Kissei, Grifols, Medison and/or Knight fail to keep us informed about commercialization efforts related to fostamatinib, or the status of the clinical development or regulatory approval pathway of other product candidates licensed to them, we may make operational and/or investment decisions that we would not have made had we been fully informed, which may adversely affect our business and operations.

Our future funding requirements will depend on many uncertain factors.

Our future funding requirements will depend upon many factors, many of which are beyond our control, including, but not limited to:

- the costs to commercialize our products in the US, or any other future product candidates, if any such candidate receives regulatory approval for commercial sale;
- the progress and success of our clinical trials and preclinical activities (including studies and manufacture of materials) of our product candidates conducted by us;
- potential future impacts, if any, of the evolving COVID-19 pandemic;
- the costs and timing of regulatory filings and approvals by us and our collaborators;
- the progress of research and development programs carried out by us and our collaborative partners;
- any changes in the breadth of our research and development programs;
- the ability to achieve the events identified in our collaborative agreements that may trigger payments to us from our collaboration partners;
- our ability to acquire or license other technologies or compounds that we may seek to pursue;
- our ability to manage our growth;
- competing technological and market developments;
- the costs and timing of obtaining, enforcing and defending our patent and other intellectual property rights; and
- expenses associated with any unforeseen litigation, including any arbitration and securities class action lawsuits.

Insufficient funds may require us to delay, scale back or eliminate some or all of our commercial efforts and/or research and development programs, to reduce personnel and operating expenses, to lose rights under existing licenses or to relinquish greater or all rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose or may adversely affect our ability to operate as a going concern.

Our success as a company is uncertain due to our history of operating losses and the uncertainty of any future profitability.*

For the three months ended March 31, 2023, we recognized loss from operations of $12.7 million primarily due to higher operating and non-operating expenses, partly offset by our net product sales and collaboration revenues. We have historically incurred losses from operations each year since we were incorporated in June 1996 other than in fiscal year 2010, due in large part to the significant research and development expenditures required to identify and validate new product candidates and pursue our development efforts, and the costs of our ongoing commercial efforts for our products. We expect to continue to incur losses from operations, at least in the next 12 months, and there can be no assurance that we will generate annual operating income in the foreseeable future. Currently, our potential sources of revenues are our sales of our products, upfront payments, research and development contingent payments and royalty payments pursuant to our collaboration arrangements, which may never materialize if our collaborators do not achieve certain events or generate net sales to which these contingent payments are dependent on. If our future drug candidates fail or do not gain regulatory approval, or if our drugs do not achieve sustainable market acceptance, we may not be profitable. As of March 31, 2023, we had an accumulated deficit of approximately $1.4 billion. The extent of our future losses or profitability, if any, especially due to the COVID-19 pandemic, is highly uncertain.

If our corporate collaborations or license agreements are unsuccessful, or if we fail to form new corporate collaborations or license agreements, our research and development efforts could be delayed.

Our strategy depends upon the formation and sustainability of multiple collaborative arrangements and license agreements with third parties now and in the future. We rely on these arrangements for not only financial resources, but also for expertise we need now and in the future relating to clinical trials, manufacturing, sales and marketing, and for licenses to technology rights. To date, we have entered into several such arrangements with corporate collaborators; however, we do not know if these collaborations or additional collaborations with third parties, if any, will dedicate sufficient resources or if any development or commercialization efforts by third parties will be successful. In addition, our corporate collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a drug candidate or development program. Should a collaborative partner fail to develop or commercialize a compound or product to which it has rights from us for any reason, including corporate restructuring, such failure might delay our ongoing research and development efforts, because we might not receive any future payments, and we would not receive any royalties associated with such compound or product. We may seek another collaborator or licensee in the future for clinical development and commercialization of fostamatinib, as well as our other clinical programs, which we may not be able to obtain on commercially reasonable terms or at all. If we are unable to form new collaborations or enter into new license agreements, our research and development efforts could be delayed. In addition, the continuation of some of our partnered drug discovery and development programs may be dependent on the periodic renewal of our corporate collaborations.

Each of our collaborations could be terminated by the other party at any time, and we may not be able to renew these collaborations on acceptable terms, if at all, or negotiate additional corporate collaborations on acceptable terms, if at all. If these collaborations terminate or are not renewed, any resultant loss of revenues from these collaborations or loss of the resources and expertise of our collaborative partners could adversely affect our business.

Conflicts also might arise with collaborative partners concerning proprietary rights to particular compounds. While our existing collaborative agreements typically provide that we retain milestone payments, royalty rights and/or revenue sharing with respect to drugs developed from certain compounds or derivative compounds, any such payments or royalty rights may be at reduced rates, and disputes may arise over the application of payment provisions or derivative payment provisions to such drugs, and we may not be successful in such disputes. For example, in September 2018, BerGenBio served us with a notice of arbitration seeking declaratory relief related to the interpretation of provisions under our June 2011 license agreement, particularly as they relate to the rights and obligations of the parties in the event of the license or sale of a product in the program by BerGenBio and/or the sale of BerGenBio to a third party. The arbitration panel dismissed four of the six declarations sought by BerGenBio, and we thereafter consented to one of the remaining declarations requested by BerGenBio. On February 27, 2019, the arbitration panel issued a determination granting the declaration sought by BerGenBio on the remaining issue, and held that in the event of a sale of shares by BerGenBio's shareholders where there is no monetary benefit to BerGenBio, we would not be entitled to a portion of the proceeds from such a sale. In this circumstance where the revenue share provision is not triggered, the milestone and royalty payment provisions remain in effect. While we do not believe that the determination will have an adverse effect on our operations, cash flows or financial condition, we can make no assurance regarding any such impact. Additionally,

the management teams of our collaborators may change for various reasons including due to being acquired. Different management teams or an acquiring company of our collaborators may have different priorities which may have adverse results on the collaboration with us.

We are also a party to various license agreements that give us rights to use specified technologies in our research and development processes. The agreements pursuant to which we have in-licensed technology permit our licensors to terminate the agreements under certain circumstances. If we are not able to continue to license these and future technologies on commercially reasonable terms, our product development and research may be delayed or otherwise adversely affected.

If conflicts arise between our collaborators or advisors and us, any of them may act in their self-interest, which may be adverse to our stockholders' interests.

If conflicts arise between us and our corporate collaborators or scientific advisors, the other party may act in its self-interest and not in the interest of our stockholders. Some of our corporate collaborators are conducting multiple product development efforts within each disease area that is the subject of the collaboration with us or may be acquired or merged with a company having a competing program. In some of our collaborations, we have agreed not to conduct, independently or with any third party, any research that is competitive with the research conducted under our collaborations. Our collaborators, however, may develop, either alone or with others, products in related fields that are competitive with the products or potential products that are the subject of these collaborations. Competing products, either developed by our collaborators or to which our collaborators have rights, may result in their withdrawal of support for our product candidates.

If any of our corporate collaborators were to breach or terminate its agreement with us or otherwise fail to conduct the collaborative activities successfully and in a timely manner, the preclinical or clinical development or commercialization of the affected product candidates or research programs could be delayed or terminated. We generally do not control the amount and timing of resources that our corporate collaborators devote to our programs or potential products. We do not know whether current or future collaborative partners, if any, might pursue alternative technologies or develop alternative products either on their own or in collaboration with others, including our competitors, as a means for developing treatments for the diseases targeted by collaborative arrangements with us.

Our success is dependent on intellectual property rights held by us and third parties, and our interest in such rights is complex and uncertain.

Our success will depend to a large part on our own, our licensees' and our licensors' ability to obtain and defend patents for each party's respective technologies and the compounds and other products, if any, resulting from the application of such technologies. For example, fostamatinib is covered as a composition of matter in a US issued patent that has an expected expiration date of September 2031, after taking into account patent term adjustment and extension rules.

In the future, our patent position might be highly uncertain and involve complex legal and factual questions. For example, we may be involved in post-grant proceedings before the US Patent and Trademark Office. Post-grant proceedings are complex and expensive legal proceedings and there is no assurance we will be successful in any such proceedings. A post-grant proceeding could result in our losing our patent rights and/or our freedom to operate and/or require us to pay significant royalties. Additionally, third parties may challenge the validity, enforceability or scope of our issued patents, which may result in such patents being narrowed, invalidated or held unenforceable through interference, opposition or invalidity proceedings before the US Patent and Trademark Office or non-US patent offices. Any successful opposition to our patents could deprive us of exclusive rights necessary for the successful commercialization of fostamatinib or our other product candidates. Oppositions could also be filed to complementary patents, such as formulations, methods of manufacture and methods of use, that are intended to extend the patent life of the overall portfolio beyond the patent life covering the composition of matter. A successful opposition to any such complementary patent could impact our ability to extend the life of the overall portfolio beyond that of the related composition of matter patent.

An adverse outcome may allow third parties to use our intellectual property without a license and/or allow third parties to introduce generic and other competing products, any of which would negatively impact our business. For example, in June 2022, we received a notice letter from Annora advising that it has filed an ANDA with the FDA for a

generic version of TAVALISSE and asserting that certain patents related to TAVALISSE that are listed in the Orange Book will not be infringed by Annora's proposed product, are invalid and/or are unenforceable. In July 2022, we filed a lawsuit in the US District Court for the District of New Jersey against Annora and its subsidiaries for infringement of those US patents. In September 2022, Annora and its subsidiaries answered and counterclaimed for declaratory judgment of non-infringement and invalidity of those patents. We filed an answer to Annora's counterclaims on October 12, 2022. Annora served invalidity and non-infringement contentions on December 31, 2022. We intend to vigorously enforce and defend our intellectual property rights related to TAVALISSE. Should Annora or any other third parties receive FDA approval of an ANDA for a generic version of fostamatinib or a 505(b)(2) NDA with respect to fostamatinib, and if our patents covering fostamatinib were held to be invalid (or if such competing generic versions of fostamatinib were found to not infringe our patents), then they could introduce generic versions of fostamatinib or other such 505(b)(2) products before our patents expire, and the resulting competition would negatively affect our business, financial condition and results of operations. Please also see the risk factor entitled, "If manufacturers obtain approval for generic versions of our products, or of products with which we compete, our business may be harmed."

Additional uncertainty may result because no consistent policy regarding the breadth of legal claims allowed in biotechnology patents has emerged to date. Accordingly, we cannot predict the breadth of claims allowed in our or other companies' patents.

Because the degree of future protection for our proprietary rights is uncertain, we cannot assure you that:

- we were the first to make the inventions covered by each of our pending patent applications;
- we were the first to file patent applications for these inventions;
- others will not independently develop similar or alternative technologies or duplicate any of our technologies;
- any of our pending patent applications will result in issued patents;
- any patents issued to us or our collaborators will provide a basis for commercially viable products or will provide us with any competitive advantages or will not be challenged by third parties;
- we will develop additional proprietary technologies that are patentable;
- we will obtain a supplemental protection certificate that will extend the protection afforded by the patent to the product with a marketing authorization; or
- the patents of others will not have a negative effect on our ability to do business.

We rely on trade secrets to protect technology where we believe patent protection is not appropriate or obtainable; however, trade secrets are difficult to protect. While we require employees, collaborators and consultants to enter into confidentiality agreements, we may not be able to adequately protect our trade secrets or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information.

We are a party to certain in-license agreements that are important to our business, and we generally do not control the prosecution of in-licensed technology. Accordingly, we are unable to exercise the same degree of control over this intellectual property as we exercise over our internally developed technology. Moreover, some of our academic institution licensors, research collaborators and scientific advisors have rights to publish data and information in which we have rights. If we cannot maintain the confidentiality of our technology and other confidential information in connection with our collaborations, our ability to receive patent protection or protect our proprietary information may otherwise be impaired. In addition, some of the technology we have licensed relies on patented inventions developed using US government resources.

The US government retains certain rights, as defined by law, in such patents, and may choose to exercise such rights. Certain of our in-licenses may be terminated if we fail to meet specified obligations. If we fail to meet such obligations and any of our licensors exercise their termination rights, we could lose our rights under those agreements. If we lose any of our rights, it may adversely affect the way we conduct our business. In addition, because certain of our licenses are sublicenses, the actions of our licensors may affect our rights under those licenses.

If a dispute arises regarding the infringement or misappropriation of the proprietary rights of others, such dispute could be costly and result in delays in our research and development activities, partnering and commercialization activities.

Our success will depend, in part, on our ability to operate without infringing or misappropriating the proprietary rights of others. There are many issued patents and patent applications filed by third parties relating to products or processes that are similar or identical to our licensors or ours, and others may be filed in the future. There may also be copyrights or trademarks that third parties hold. There can be no assurance that our activities, or those of our licensors, will not violate intellectual property rights of others. We believe that there may be significant litigation in the industry regarding patent and other intellectual property rights, and we do not know if our collaborators or we would be successful in any such litigation. Any legal action against our collaborators or us claiming damages or seeking to enjoin commercial activities relating to the affected products, our methods or processes could:

- require our collaborators or us to obtain a license to continue to use, manufacture or market the affected products, methods or processes, which may not be available on commercially reasonable terms, if at all;
- prevent us from using the subject matter claimed in the patents held by others;
- subject us to potential liability for damages;
- consume a substantial portion of our managerial and financial resources; and
- result in litigation or administrative proceedings that may be costly, whether we win or lose.

Our effective tax rate may fluctuate, and we may incur obligations in tax jurisdictions in excess of accrued amounts.

We are subject to taxation in numerous US states and territories. As a result, our effective tax rate is derived from a combination of applicable tax rates in the various places that we operate. In preparing our financial statements, we estimate the amount of tax that will become payable in each of such places. Nevertheless, our effective tax rate may be different than experienced in the past due to numerous factors, including passage of the newly enacted federal income tax law, changes in the mix of our profitability from state to state, the results of examinations and audits of our tax filings, our inability to secure or sustain acceptable agreements with tax authorities, changes in accounting for income taxes and changes in tax laws. Any of these factors could cause us to experience an effective tax rate significantly different from previous periods or our current expectations and may result in tax obligations in excess of amounts accrued in our financial statements.

Our ability to use net operating losses (NOLs) and certain other tax attributes is uncertain and may be limited.

Our ability to use our federal and state NOLs to offset potential future taxable income and related income taxes that would otherwise be due is dependent upon our generation of future taxable income before the expiration dates of the NOLs, and we cannot predict with certainty when, or whether, we will generate sufficient taxable income to use all of our NOLs. Federal NOLs generated prior to 2018 will continue to be governed by the NOL carryforward rules as they existed prior to the adoption of the Tax Cuts and Jobs Act (Tax Act), which means that generally they will expire 20 years after they were generated if not used prior thereto. Many states have similar laws. Accordingly, our federal and state NOLs could expire unused and be unavailable to offset future income tax liabilities. Under the Tax Act as modified by the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), federal NOLs incurred in tax years beginning after December 31, 2017 and before January 1, 2021 may be carried back to each of the five tax years preceding such loss, and NOLs arising in tax years beginning after December 31, 2020 may not be carried back. Moreover, federal NOLs generated in tax years ending after December 31, 2017 may be carried forward indefinitely, but the deductibility of such federal NOLs may be limited to 80% of current year taxable income for tax years beginning after January 1, 2021. Under A.B. 85, our California NOL carryforwards are suspended for tax years 2020, 2021, and 2022, but the period to use these carryovers was extended. Further, the Tax Act requires the taxpayers to capitalize Research and Experimental (R&E) expenditures under Section 174 of the Internal Revenue Code, as amended (Code), effective for taxable years beginning after December 31, 2021, which will reduce our NOLs beginning in 2022. R&E expenditures attributable to US-based research must be amortized over a period of 5 years and R&E expenditures attributable to research conducted outside of the US must be amortized over a period of 15 years.

In addition, utilization of NOLs to offset potential future taxable income and related income taxes that would otherwise be due is subject to annual limitations under the "ownership change" provisions of Sections 382 and 383 of the Code and similar state provisions, which may result in the expiration of NOLs before future utilization. In general, under the Code, if a corporation undergoes an "ownership change," generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period, the corporation's ability to use its pre-change NOLs and other pre-change tax attributes (such as research and development credit carryforwards) to offset its post-change taxable income or taxes may be limited. Our equity offerings and other changes in our stock ownership, some of which are outside of our control, may have resulted or could in the future result in an ownership change. Although we have completed studies to provide reasonable assurance that an ownership change limitation would not apply, we cannot be certain that a taxing authority would reach the same conclusion. If, after a review or audit, an ownership change limitation were to apply, utilization of our domestic NOLs and tax credit carryforwards could be limited in future periods and a portion of the carryforwards could expire before being available to reduce future income tax liabilities. Moreover, our ability to utilize our NOLs is conditioned upon us achieving profitability and generating US federal taxable income.

Because we expect to be dependent upon collaborative and license agreements, we might not meet our strategic objectives.

Our ability to generate revenue in the near term depends on the timing of recognition of certain upfront payments, achievement of certain payment triggering events with our existing collaboration agreements and our ability to enter into additional collaborative agreements with third parties. Our ability to enter into new collaborations and the revenue, if any, that may be recognized under these collaborations is highly uncertain. If we are unable to enter into one or more new collaborations, our business prospects could be harmed, which could have an immediate adverse effect on our ability to continue to develop our compounds and on the trading price of our stock. Our ability to enter into a collaboration may be dependent on many factors, such as the results of our clinical trials, competitive factors and the fit of one of our programs with another company's risk tolerance, including toward regulatory issues, patent portfolio, clinical pipeline, the stage of the available data, particularly if it is early, overall corporate goals and financial position.

To date, a portion of our revenues have been related to the research or transition phase of each of our collaborative agreements. Such revenues are for specified periods, and the impact of such revenues on our results of operations is at least partially offset by corresponding research costs. Following the completion of the research or transition phase of each collaborative agreement, additional revenues may come only from payments triggered by milestones and/or the achievement of other contingent events, and royalties, which may not be paid, if at all, until certain conditions are met. This risk is heightened due to the fact that unsuccessful research efforts may preclude us from receiving any contingent payments under these agreements. Our receipt of revenues from collaborative arrangements is also significantly affected by the timing of efforts expended by us and our collaborators and the timing of lead compound identification. We have received payments from our current collaborations including Lilly, Grifols, Kissei, Medison, Knight, BerGenBio, and Daiichi. Under several agreements, future payments may not be earned until the collaborator has advanced product candidates into clinical testing, which may never occur or may not occur until sometime well into the future. If we are not able to generate revenue under our collaborations when and in accordance with our expectations or the expectations of industry analysts, this failure could harm our business and have an immediate adverse effect on the trading price of our common stock.

Our business requires us to generate meaningful revenue from royalties and licensing agreements. To date, we have not recognized material amount of revenue from royalties for the commercial sale of drugs, and we do not know when we will be able to generate such meaningful revenue in the future.

Securities class action lawsuits or other litigation could result in substantial damages and may divert management's time and attention from our business.

We have been subject to class action lawsuits in the past and we may be subject to lawsuits in the future, such as those that might occur if there was to be a change in our corporate strategy. These and other lawsuits are subject to inherent uncertainties, and the actual costs to be incurred relating to the lawsuit will depend upon many unknown factors. The outcome of litigation is necessarily uncertain, and we could be forced to expend significant resources in the defense of such suits, and we may not prevail. Monitoring and defending against legal actions is time-consuming for our management and detracts from our ability to fully focus our internal resources on our business activities. In addition, we

may incur substantial legal fees and costs in connection with any such litigation. We have not established any reserves for any potential liability relating to any such potential lawsuits. It is possible that we could, in the future, incur judgments or enter into settlements of claims for monetary damages. A decision adverse to our interests on any such actions could result in the payment of substantial damages, or possibly fines, and could have an adverse effect on our cash flow, results of operations and financial position.

If our competitors develop technologies that are more effective than ours, our commercial opportunity will be reduced or eliminated.

The biotechnology and pharmaceutical industries are intensely competitive and subject to rapid and significant technological change. Many of the drugs that we are attempting to discover will be competing with existing therapies. In addition, a number of companies are pursuing the development of pharmaceuticals that target the same diseases and conditions that we are targeting. For example, the commercialization of new pharmaceutical products is highly competitive, and we face substantial competition with respect to our products in which there are existing therapies and drug candidates in development for the treatment of hematologic disorders and cancer that may be alternative therapies to our products. Many of our competitors, including a number of large pharmaceutical companies that compete directly with us, have significantly greater financial resources and expertise commercializing approved products than we do. Also, many of our competitors are large pharmaceutical companies that will have a greater ability to reduce prices for their competing drugs in an effort to gain market share and undermine the value proposition that we might otherwise be able to offer to payers. We face, and will continue to face, intense competition from pharmaceutical and biotechnology companies, as well as from academic and research institutions and government agencies, both in the US and abroad. Some of these competitors are pursuing the development of pharmaceuticals that target the same diseases and conditions as our research programs. Our competitors including fully integrated pharmaceutical companies have extensive drug discovery efforts and are developing novel small-molecule pharmaceuticals. We also face significant competition from organizations that are pursuing the same or similar technologies, including the discovery of targets that are useful in compound screening, as the technologies used by us in our drug discovery efforts.

Competition may also arise from:

- new or better methods of target identification or validation;
- generic versions of our products or of products with which we compete;
- other drug development technologies and methods of preventing or reducing the incidence of disease;
- new small molecules; or
- other classes of therapeutic agents.

Our competitors or their collaborative partners may utilize discovery technologies and techniques or partner with collaborators in order to develop products more rapidly or successfully than we or our collaborators are able to do. Many of our competitors, particularly large pharmaceutical companies, have substantially greater financial, technical and human resources and larger research and development staffs than we do. In addition, academic institutions, government agencies and other public and private organizations conducting research may seek patent protection with respect to potentially competitive products or technologies and may establish exclusive collaborative or licensing relationships with our competitors.

We believe that our ability to compete is dependent, in part, upon our ability to create, maintain and license scientifically-advanced technology and upon our and our collaborators' ability to develop and commercialize pharmaceutical products based on this technology, as well as our ability to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary technology or processes, secure effective market access by ensuring competitive pricing and reimbursement in territories of interest, and secure sufficient capital resources for the expected substantial time period between technological conception and commercial sales of products based upon our technology. The failure by any of our collaborators or us in any of those areas may prevent the successful commercialization of our potential drug targets.

Many of our competitors, either alone or together with their collaborative partners, have significantly greater

experience than we do in:

- identifying and validating targets;
- screening compounds against targets; and
- undertaking preclinical testing and clinical trials.

Accordingly, our competitors may succeed in obtaining patent protection, identifying or validating new targets or discovering new drug compounds before we do.

Our competitors might develop technologies and drugs that are more effective or less costly than any that are being developed by us or that would render our technology and product candidates obsolete and noncompetitive. In addition, our competitors may succeed in obtaining the approval of the FDA or other regulatory agencies for product candidates more rapidly. Companies that complete clinical trials, obtain required regulatory agency approvals and commence commercial sale of their drugs before us may achieve a significant competitive advantage, including certain patent and FDA marketing exclusivity rights that would delay or prevent our ability to market certain products. Any drugs resulting from our research and development efforts, or from our joint efforts with our existing or future collaborative partners, might not be able to compete successfully with competitors' existing or future products or obtain regulatory approval in the US or elsewhere.

We face and will continue to face intense competition from other companies for collaborative arrangements with pharmaceutical and biotechnology companies, for establishing relationships with academic and research institutions and for licenses to additional technologies. These competitors, either alone or with their collaborative partners, may succeed in developing technologies or products that are more effective than ours.

Our ability to compete successfully will depend, in part, on our ability to:

- identify and validate targets;
- discover candidate drug compounds that interact with the targets we identify in a safe and efficacious way;
- attract and retain scientific and product development personnel;
- recruit subjects into our clinical trials;
- obtain and maintain required regulatory approvals;
- obtain patent or other proprietary protection for our new drug compounds and technologies;
- enter commercialization agreements for our new drug compounds; and
- obtain and maintain appropriate reimbursement price and positive recommendations by HTA bodies.

Our stock price may be volatile, and our stockholders' investment in our common stock could decline in value.

The market prices for our common stock and the securities of other biotechnology companies have been highly volatile and may continue to be highly volatile in the future. The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our common stock:

- the progress and success of our clinical trials and preclinical activities (including studies and manufacture of materials) of our product candidates conducted by us;
- our ability to continue to sell our products in the US;
- our ability to enter into partnering opportunities across our pipeline;
- the receipt or failure to receive the additional funding necessary to conduct our business;

- selling of our common stock by large stockholders;
- presentations of detailed clinical trial data at medical and scientific conferences and investor perception thereof;
- announcements of technological innovations or new commercial products by our competitors or us;
- the announcement of regulatory applications, such as Annora's ANDA, seeking approval of generic versions of our marketed products;
- developments concerning proprietary rights, including patents;
- developments concerning our collaborations;
- publicity regarding actual or potential medical results relating to products under development by our competitors or us;
- regulatory developments in the US and foreign countries;
- changes in the structure of healthcare payment systems;
- litigation or arbitration;
- economic and other external factors or other disaster or crisis; and
- period-to-period fluctuations in financial results.

If we fail to continue to meet the listing standards of Nasdaq, our common stock may be delisted, which could have a material adverse effect on the liquidity of our common stock.

Our common stock is currently listed on the Nasdaq Global Market. The Nasdaq Stock Market LLC has requirements that a company must meet in order to remain listed on Nasdaq. In particular, Nasdaq rules require us to maintain a minimum bid price of $1.00 per share of our common stock (the "Bid Price Requirement"). If the closing bid price of our common stock falls below $1.00 per share for 30 consecutive trading days or we do not meet other listing requirements, we would fail to be in compliance with Nasdaq listing standards. There can be no assurance that we will continue to meet the Bid Price Requirement, or any other requirement in the future.

On November 22, 2022, we received a deficiency letter from the Listing Qualifications Department of the Nasdaq Stock Market LLC notifying us that, for the last 30 consecutive business days, the bid price for our common stock closed below the Bid Price Requirement.

We were provided a period of 180 calendar days, or until May 22, 2023 (the "Compliance Date"), to regain compliance with the Bid Price Requirement. On January 5, 2023, we received notification from the Listing Qualifications Department of the Nasdaq Stock Market LLC that we have regained compliance with the Bid Price Requirement because the closing bid price of our common stock closed at $1.00 or more for over 10 consecutive business days from December 13, 2022 to January 4, 2023.

While we have regained compliance, the Nasdaq Stock Market LLC may in the future initiate the delisting process with a notification letter if we were to again fall out of compliance. If we were to receive such a notification, we would be afforded a grace period of 180 calendar days to regain compliance with the minimum bid price requirement. In order to regain compliance, shares of our common stock would need to maintain a minimum closing bid price of at least $1.00 per share for a minimum of 10 consecutive trading days. In addition, we may be unable to meet other applicable Nasdaq listing requirements, including maintaining minimum levels of stockholders' equity or market values of our common stock in which case, our common stock could be delisted. If our common stock were to be delisted, the liquidity of our common stock would be adversely affected and the market price of our common stock could decrease.

The withdrawal of the UK from the EU may adversely impact our ability to obtain regulatory approvals of our product candidates in the UK and the EU, result in restrictions or imposition of taxes and duties for importing our product candidates into the UK and the EU, and may require us to incur additional expenses in order to develop, manufacture and commercialize our product candidates in the UK and the EU.*

Following the result of a referendum in 2016, the UK left the EU on January 31, 2020, commonly referred to as Brexit. Pursuant to the formal withdrawal arrangements agreed between the UK and the EU, the UK was subject to a transition period until December 31, 2020, or the Transition Period, during which EU rules continued to apply. A trade and cooperation agreement (Trade Agreement) that outlines the future trading relationship between the UK and the EU was agreed to in December 2020 and has been approved by each EU member state and the UK.

Since a significant proportion of the regulatory framework in the UK applicable to our business and our product candidates is derived from EU directives and regulations, Brexit has had, and will continue to have, a material impact upon the regulatory regime with respect to the development, manufacture, importation, approval and commercialization of our product candidates in the UK or the EU. Great Britain (made up of England, Scotland, and Wales) is no longer covered by the EEA's procedures for the grant of marketing authorizations (Northern Ireland will be covered by such procedures). The UK Government and the EU recently adopted a new agreement, the "Windsor Framework" which will replace the Northern Ireland Protocol. Once the Windsor Framework becomes law, the Medicines and Healthcare Products Regulatory Agency (MHRA) rather than the EMA will approve all medicines placed on the market in Northern Ireland.

A separate marketing authorization will be required to market drugs in Great Britain. It is currently unclear whether the MHRA in the UK is sufficiently prepared to handle the increased volume of marketing authorization applications that it is likely to receive. Any delay in obtaining, or an inability to obtain, any marketing approvals would delay or prevent us from commercializing our product candidates in the UK or the EU and restrict our ability to generate revenue and achieve and sustain profitability.

While the Trade Agreement provides for the tariff-free trade of medicinal products between the UK and the EU, there may be additional non-tariff costs to such trade which did not exist prior to the end of the Transition Period. Further, should the UK diverge from the EU from a regulatory perspective in relation to medicinal products, tariffs could be put into place in the future. We could therefore, both now and in the future, face significant additional expenses (when compared to the position prior to the end of the Transition Period) to operate our business, which could significantly and materially harm or delay our ability to generate revenues or achieve profitability of our business. Any further changes in international trade, tariff and import/export regulations as a result of Brexit or otherwise may impose unexpected duty costs or other non-tariff barriers on us. These developments, or the perception that any of them could occur, may significantly reduce global trade and, in particular, trade between the impacted nations and the UK. It is also possible that Brexit may negatively affect our ability to attract and retain employees, particularly those from the EU.

Orphan designation in Great Britain following Brexit is granted on an essentially identical basis as in the EU but is based on the prevalence of the condition in Great Britain. It is therefore possible that conditions that are currently designated as orphan conditions in Great Britain will no longer be, and conditions that are not currently designated as orphan conditions in the EU will be designated as such in Great Britain.

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

The testing and marketing of medical products and the sale of any products for which we obtain marketing approval exposes us to the risk of product liability claims. Product liability claims might be brought against us by consumers, health care providers, pharmaceutical companies or others selling or otherwise coming into contact with our products. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our products. We carry product liability insurance that is limited in scope and amount and may not be adequate to fully protect us against product liability claims. If and when we obtain marketing approval for our product candidates, we intend to expand our insurance coverage to include the sale of commercial products; however, we may be unable to obtain product liability insurance on commercially reasonable terms or in adequate amounts. 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 pharmaceutical products we develop, alone or with corporate collaborators. We, or our corporate collaborators, might not be able to obtain insurance

at a reasonable cost, if at all. While under various circumstances we are entitled to be indemnified against losses by our corporate collaborators, indemnification may not be available or adequate should any claim arise.

We depend on various scientific consultants and advisors for the success and continuation of our research and development efforts.

We work extensively with various scientific consultants and advisors. The potential success of our drug discovery and development programs depends, in part, on continued collaborations with certain of these consultants and advisors. We, and various members of our management and research staff, rely on certain of these consultants and advisors for expertise in our research, regulatory and clinical efforts. Our scientific advisors are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. We do not know if we will be able to maintain such consulting agreements or that such scientific advisors will not enter into consulting arrangements with competing pharmaceutical or biotechnology companies, any of which may have a detrimental impact on our research objectives and could have an adverse effect on our business, financial condition and results of operations.

While we have a strong compliance process in place to ensure we are complying with all requirements of law, our consulting or advisory contracts with our scientific consultants and advisors may be scrutinized under the Anti-Kickback Statute, the UK Bribery Act 2010, and other similar national and state-level legislation, which prohibit, among other things, companies from offering or paying anything of value as remuneration for ordering, purchasing, or recommending the ordering or purchasing of pharmaceutical and biological products that may be paid for, in whole or in part, by Medicare, Medicaid, or another federal healthcare program. Although there are several statutory exceptions and regulatory safe harbors that may protect these arrangements from prosecution or regulatory sanctions, our consulting and advising contracts may be subject to scrutiny if they do not fit squarely within an available exception or safe harbor.

If we use biological and hazardous materials in a manner that causes injury or violates laws, we may be liable for damages, penalties or fines.

Our research and development activities involve the controlled use of potentially harmful biological materials as well as hazardous materials, chemicals, animals, and various radioactive compounds. We cannot completely eliminate the risk of accidental contamination or injury from the use, storage, handling or disposal of these animals and materials. In the event of contamination or injury, we could be held liable for damages that result or for penalties or fines that may be imposed, and such liability could exceed our resources. We are also subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. The cost of compliance with, or any potential violation of, these laws and regulations could be significant.

Our information technology systems, or those used by our CROs or other contractors or consultants, may fail or suffer other breakdowns, cyber-attacks, or information security breaches.

We are increasingly dependent upon information technology systems, infrastructure, and data to operate our business, particularly during the COVID-19 pandemic. We also rely on third party vendors and their information technology systems. Despite the implementation of security measures, our recovery systems, security protocols, network protection mechanisms and other security measures and those of our CROs and other contractors and consultants are vulnerable to compromise from natural disasters; terrorism; war; telecommunication and electric failures; traditional computer hackers; malicious code (such as computer viruses or worms); employee error, theft or misuse; denial-of-service attacks; cyber-attacks by sophisticated nation-state and nation-state supported actors including ransomware; or other system disruptions. We receive, generate and store significant and increasing volumes of personal (including health), confidential and proprietary information. There can be no assurance that we, or our collaborators, CROs, third-party vendors, contractors and consultants will be successful in efforts to detect, prevent, protect against or fully recover systems or data from all break-downs, service interruptions, attacks or breaches. Any breakdown, cyber-attack or information security breach could result in a disruption of our drug development programs or other aspects of our business. 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. 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, incur significant remediation or litigation costs, result in product development delays, disrupt key business operations, cause loss of

revenue and divert attention of management and key information technology resources.

Hackers and data thieves are increasingly sophisticated and operate large-scale and complex automated attacks, including on companies within the healthcare industry. As the cyber-threat landscape evolves, these threats are likely growing in frequency, sophistication and intensity and are increasingly difficult to detect. The costs of maintaining or upgrading our cyber-security systems at the level necessary to keep up with our expanding operations and prevent against potential attacks are increasing. Cyber threats may be generic, or they may be targeted against our information systems. Our network and storage applications and those of our contract manufacturing organizations, collaborators, contractors, CROs or vendors may be subject to unauthorized access or processing by hackers or breached due to operator or other human error, theft, malfeasance or other system disruptions. We may be unable to anticipate or immediately detect information security incidents and the damage caused by such incidents. These data breaches and any unauthorized access, processing or disclosure of our information or intellectual property could compromise our intellectual property and expose our sensitive business information. Such attacks, such as in the case of a ransomware attack, also may interfere with our ability to continue to operate and may result in delays and shortcomings due to an attack that may encrypt our or our service providers' or partners' systems unusable. Additionally, because our services involve the processing of personal information and other sensitive information about individuals we are subject to various laws, regulations, industry standards, and contractual requirements related to such processing. Any event that leads to unauthorized access, processing or disclosure of personal information, including personal information regarding our clinical trial participants or employees, could harm our reputation and business, compel us to comply with federal and/or state breach notification laws and foreign law equivalents, subject us to investigations and mandatory corrective action, and otherwise subject us to liability under laws, regulations or contracts that protect the privacy and security of personal information, which could disrupt our business, damage our reputation with our stakeholders, result in increased costs or loss of revenue, lead to negative publicity or result in significant financial exposure. The CCPA, in particular, includes a private right of action for California consumers whose personal information is impacted by a data security incident resulting from a company's failure to maintain reasonable security procedures, and hence may result in civil litigation in the event of a security breach impacting such information. In addition, legislators and regulators in the US have enacted and are proposing new and more robust privacy and cybersecurity laws and regulations in response to increasing broad-based cyberattacks, including the CCPA and New York SHIELD Act. New data security laws add additional complexity, requirements, restrictions and potential legal risk, and compliance programs may require additional investment in resources, and could impact strategies and availability of previously useful data.

The costs to respond to a security breach and/or to mitigate any identified security vulnerabilities could be significant, our efforts to address these issues may not be successful, and these issues could result in interruptions, delays, negative publicity, loss of customer trust, and other harms to our business and competitive position. Remediation of any potential security breach may involve significant time, resources, and expenses. We could be required to fundamentally change our business activities and practices in response to a security breach and our systems or networks may be perceived as less desirable, which could negatively affect our business and damage our reputation.

A security breach may cause us to breach our contracts with third parties. Our agreements with relevant stakeholders such as collaborators may require us to use legally required, industry-standard or reasonable measures to safeguard personal information. A security breach could lead to claims by relevant stakeholders that we have failed to comply with such contractual obligations, or require us to cooperate with these stakeholders in their own compliance efforts related to the security breach. In addition, any non-compliance with our data privacy obligations in our contracts or our inability to flow down such obligations from relevant stakeholders to our vendors may cause us to breach our contracts. As a result, we could be subject to legal action or the relevant stakeholders could end their relationships with us. There can be no assurance that the limitations of liability in our contracts would be enforceable or adequate or would otherwise protect us from liabilities or damages.

We may not have adequate insurance coverage for security incidents or breaches. The successful assertion of one or more large claims against us that exceeds our available insurance coverage, or results in changes to our insurance policies (including premium increases or the imposition of large deductible or co-insurance requirements), could have an adverse effect on our business. In addition, we cannot be sure that our existing insurance coverage will continue to be available on acceptable terms or that our insurers will not deny coverage as to any future claim.

Future equity issuances or a sale of a substantial number of shares of our common stock may cause the price of our common stock to decline.

Because we will continue to need additional capital in the future to continue to expand our business and our research and development activities, among other things, we may conduct additional equity offerings. For example, on August 3, 2021, a new automatic shelf registration statement was filed by us as well-known seasoned issuer (WKSI). The automatic shelf registration statement was filed to register, among other securities, the sale of up to a maximum aggregate offering price of $100.0 million of shares of our common stock that may be issued and sold from time to time under our Open Market Sale Agreement with Jefferies, and a base prospectus which covers the offering, issuance, and sale by us of the securities identified above from time to time in one or more offerings. On March 1, 2022, we filed a post-effective amendment to the automatic shelf registration statement immediately after filing our Annual Report Form 10-K for the year ended December 31, 2021 because we no longer qualified as a WKSI upon filing of such Annual Report. The post-effective amendment was declared effective on May 3, 2022. The post-effective amendment registers, among other securities, a base prospectus which covers the offering, issuance, and sale by us of up to $250.0 million in the aggregate of the securities identified from time to time in one or more offerings, which include the $100.0 million of shares of our common stock that may be offered, issued and sold under the Open Market Sale Agreement.

We may also in the future enter into underwriting or sales agreements with financial institutions for the offer and sale of any combination of common stock, preferred stock, debt securities and warrants in one or more offerings. If we or our stockholders sell, or if it is perceived that we or they will sell, substantial amounts of our common stock in the public market, the market price of our common stock could fall. A decline in the market price of our common stock could make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate. In addition, future sales by us of our common stock may be dilutive to existing stockholders. Furthermore, if we obtain funds through a credit facility or through the issuance of debt or preferred securities, these securities would likely have rights senior to the rights of our common stockholders, which could impair the value of our common stock.

Risks Related to Clinical Development and Regulatory Approval

Enacted or future legislation, and/or potentially unfavorable pricing regulations or other healthcare reform initiatives, may increase the difficulty and cost for us to obtain regulatory approval of our product candidates and/or commercialize fostamatinib or our product candidates, once approved, and affect the prices we may set or obtain.

The regulations that govern, among other things, regulatory approvals, coverage, pricing and reimbursement for new drug products vary widely from country to country. In the US 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 regulatory approval of our product candidates, restrict or regulate post-approval activities and affect our ability to successfully sell TAVALISSE, REZLIDHIA, or any product candidates for which we obtain regulatory approval in the future. In particular, in March 2010, the Affordable Care Act (ACA) was enacted, which substantially changed the way health care is financed by both governmental and private insurers, and continues to significantly impact the US pharmaceutical industry. On June 17, 2021, the US Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the law. Prior to the Supreme Court's decision, President Biden issued an executive order that instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the Affordable Care Act. It is unclear how future actions before the Supreme Court, other such litigation, and the healthcare reform measures of the Biden administration will impact the Affordable Care Act and our business.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, 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 the costs of healthcare and/or impose price controls may adversely affect, for example:

- the demand for TAVALISSE, REZLIDHIA, or our product candidates, if we obtain regulatory approval;
- our ability to set a price that we believe is fair for our products;

- our ability to generate revenue 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.

In the US, the EU and other potentially significant markets for our current and future products, government authorities and third-party payors are increasingly attempting to limit or regulate the price of medical products and services, particularly for new and innovative products and therapies, which has resulted in lower average selling prices. In the US, there have been several Congressional inquiries and federal legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer-sponsored patient assistance programs, and reform government program reimbursement methodologies for drugs.

On March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 into law, which, among other changes, eliminates the statutory Medicaid drug rebate cap, currently set at 100% of a drug's average manufacture price, for single source and innovator multiple source drugs, beginning January 1, 2024. The American Rescue Plan Act also temporarily increased premium tax credit assistance for individuals eligible for subsidies under the ACA for 2021 and 2022 and removed the 400% federal poverty level limit that otherwise applies for purposes of eligibility to receive premium tax credits. The Inflation Reduction Act of 2022 (IRA) extended this increased tax credit assistance and removal of the 400% federal poverty limit through 2025. Additionally, beginning in April 2013, the Budget Control Act of 2011 created an automatic reduction of Medicare payments to providers of up to 2%. As a result of the COVID-19 pandemic, this reduction was temporarily suspended from May 1, 2020 through March 31, 2022, with subsequent reductions to 1% from April 1, 2022 until June 30, 2022. The 2% reduction was then reinstated and has been in effect since June 30, 2022, and will remain in effect (with additional reductions of 2.25% in the first half of 2030 and 3% in the second half of 2030 to offset the COVID-19 suspension) until 2031, unless additional Congressional action is taken. Moreover, on June 16, 2022, the Federal Trade Commission issued a policy statement stating its intension to increase enforcement scrutiny of "exclusionary rebates" to PBMs and other intermediaries that "foreclose competition." On August 16, 2022, President Biden signed into law the IRA, which, among other reforms, allows Medicare to: beginning in 2026, establish a "maximum fair price" for certain pharmaceutical and biological products covered under Medicare Parts B and D; beginning in 2023, penalize drug companies that raise prices for products covered under Medicare Parts B and D faster than inflation; and beginning in 2025 impose new discounts obligations on pharmaceutical and biological manufacturers for products covered under Medicare Part D.

The Biden administration has also taken executive action to address drug pricing and other healthcare policy changes. For example, in response to a July 9, 2021 Executive Order from President Biden that included several prescription drug initiatives, on September 9, 2021, the Department of Health and Human Services issued a Comprehensive Plan for Addressing High Drug Prices that identified potential legislative policies and administrative tools that Congress and the agency can pursue in order to make drug prices more affordable and equitable, improve and promote competition throughout the prescription drug industry, and foster scientific innovation. Additionally, on September 12, 2022, President Biden issued an Executive Order to promote biotechnology and biomanufacturing innovation. The Order noted several methods through which the Biden Administration would support the advancement of biotechnology and biomanufacturing in healthcare, and instructed the Department of Health and Human Service to submit, within 180 days of the Order, a report assessing how to use biotechnology and biomanufacturing to achieve medical breakthroughs, reduce the overall burden of disease, and improve health outcomes. On October 14, 2022, President Biden issued an Executive Order on Lowering Prescription Drug Costs for Americans which instructed the Secretary of the Department of Health and Human Services to consider whether to select for testing by the CMS Innovation Center new health care payment and delivery models that would lower drug costs and promote access to innovative drug therapies for beneficiaries enrolled in the Medicare and Medicaid programs. The Executive Order further directed the Secretary of the Department of Health and Human Services to submit, within 90 days after the date of the Executive Order, a report regarding any models that may lead to lower cost-sharing for commonly used drugs and support value-based payment that promotes high-quality care. On February 14, 2023, the Department of Health and Human Services issued a report in response to the October 14, 2022, Executive Order, which, among other things, selects three potential drug affordability and accessibility models to be tested by the CMS Innovation Center. Specifically, the report addresses: (1) a model that would allow Part D Sponsors to

establish a "high-value drug list" setting the maximum co-payment amount for certain common generic drugs at $2; (2) a Medicaid-focused model that would establish a partnership between CMS, manufacturers, and state Medicaid agencies that would result in multi-state outcomes-based agreements for certain cell and gene therapy drugs; and (3) a model that would adjust Medicare Part B payment amounts for Accelerated Approval Program drugs to advance the developments of novel treatments. It remains to be seen how these drug pricing initiatives will affect the broader pharmaceutical industry.

At the state level, individual states are increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing. Specifically, several U.S. states and localities have enacted legislation requiring pharmaceutical companies to establish marketing compliance programs, file periodic reports, and/or make periodic public disclosures on sales, marketing, pricing, clinical trials, and other activities. Other state laws prohibit certain marketing-related activities including the provision of gifts, meals or other items to certain healthcare providers, and restrict the ability of manufacturers to offer co-pay support to patients for certain prescription drugs. Several state laws require disclosures related to state agencies and/or commercial purchasers with respect to certain price increases that exceed a certain level as identified in the relevant statutes. Another emerging trend at the state level is the establishment of prescription drug affordability boards, some of which will prospectively permit certain states to establish upper payment limits for drugs that the state has determined to be "high-cost". Some of these laws and regulations contain ambiguous requirements that government officials have not yet clarified. Given the lack of clarity in the laws and their implementation, our reporting actions could be subject to the penalty provisions of the pertinent federal and state laws and regulations.

Furthermore, the increased emphasis on managed healthcare in the US and on country and regional pricing and reimbursement controls in the EU and the UK will put additional pressure on product pricing, reimbursement and usage, which may adversely affect our sales and results of operations. These pressures can arise from rules and practices of managed care groups, judicial decisions and governmental laws and regulations related to Medicare, Medicaid and healthcare reform, pharmaceutical reimbursement policies and pricing in general. Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products.

We cannot predict the likelihood, nature, or extent of health reform initiatives that may arise from future legislation or administrative action. However, we expect these initiatives to increase pressure on drug pricing. Further, certain broader legislation that is not targeted to the health care industry may nonetheless adversely affect our profitability. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

See "Part I, Item 1 – Business – Government Regulation – Healthcare Reform" of our Annual Report on Form 10-K for the year ended December 31, 2022.

Regulatory approval for any approved product is limited by the FDA, the EC and other regulators to those specific indications and conditions for which clinical safety and efficacy have been demonstrated, and we may incur significant liability if it is determined that we are promoting the "off-label" use of our products or any of our future product candidates if approved.

Any regulatory approval is limited to those specific diseases, indications and patient populations for which a product is deemed to be safe and effective by the FDA, the EC and other regulators. For example, the FDA-approved label for TAVALISSE is only approved for use in adults with ITP who have had an insufficient response to other treatments and for REZLIDHIA is only approved for use in adult patients with R/R AML with a susceptible IDH1 mutation as detected by an FDA-approved test. In addition to the FDA approval required for new formulations, any new indication for an approved product also requires FDA approval. If we are not able to obtain FDA approval for any desired future indications for our products and product candidates, our ability to effectively market and sell our products may be reduced and our business may be adversely affected.

While physicians may choose to prescribe drugs for uses that are not described in the product's labeling and for uses that differ from those tested in clinical studies and approved by the regulatory authorities, our ability to promote the products is limited to those indications and patient populations that are specifically approved by the FDA. These "off-

label" uses are common across medical specialties and may constitute an appropriate treatment for some patients in varied circumstances. We have implemented compliance and monitoring policies and procedures, including a process for internal review of promotional materials, to deter the promotion of our products for off-label uses. We cannot guarantee that these compliance activities will prevent or timely detect off-label promotion by sales representatives or other personnel in their communications with health care professionals, patients and others, particularly if these activities are concealed from us. Regulatory authorities in the US generally do not regulate the behavior of physicians in their choice of treatments. Regulatory authorities do, however, restrict communications by pharmaceutical companies on the subject of off-label use. If our promotional activities fail to comply with the FDA's or other competent national authority's regulations or guidelines, we may be subject to warnings from, or enforcement action by, these regulatory authorities. In addition, our failure to follow FDA rules and guidelines relating to promotion and advertising may cause the FDA to issue warning letters or untitled letters, suspend or withdraw an approved product from the market, require a recall or institute fines, which could result in the disgorgement of money, operating restrictions, injunctions or civil or criminal enforcement, and other consequences, any of which could harm our business.

Notwithstanding the regulatory restrictions on off-label promotion, the FDA and other regulatory authorities allow companies to engage in truthful, non-misleading and non-promotional scientific exchange concerning their products. We engage in medical education activities and communicate with investigators and potential investigators regarding our clinical trials. If the FDA or other regulatory or enforcement authorities determine that our communications regarding our marketed product are not in compliance with the relevant regulatory requirements and that we have improperly promoted off-label uses, or that our communications regarding our investigational products are not in compliance with the relevant regulatory requirements and that we have improperly engaged in pre-approval promotion, we may be subject to significant liability, including civil and administrative remedies as well as criminal sanctions.

Delays in clinical testing could result in increased costs to us.

We may not be able to initiate or continue clinical studies or trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these clinical trials as required by the FDA or other regulatory authorities, whether due to the impacts of the COVID-19 pandemic, the Russian-Ukrainian conflict or otherwise. Even if we are able to enroll a sufficient number of patients in our clinical trials, if the pace of enrollment is slower than we expect, the development costs for our product candidates may increase and the completion of our clinical trials may be delayed, or our clinical trials could become too expensive to complete. Significant delays in clinical testing could negatively impact our product development costs and timing. Our estimates regarding timing are based on a number of assumptions, including assumptions based on past experience with our other clinical programs. If we are unable to enroll the patients in these trials at the projected rate, the completion of the clinical program could be delayed and the costs of conducting the program could increase, either of which could harm our business.

Clinical trials can be delayed for a variety of reasons, including delays in obtaining regulatory approval to commence a study, delays from scaling up of a study, delays in reaching agreement on acceptable clinical trial agreement terms with prospective clinical sites, delays in obtaining institutional review board approval to conduct a study at a prospective clinical site or delays in recruiting subjects to participate in a study. In addition, we typically rely on third-party clinical investigators to conduct our clinical trials and other third-party organizations to oversee the operations of such trials and to perform data collection and analysis. The clinical investigators are not our employees, and we cannot control the amount or timing of resources that they devote to our programs. Failure of the third-party organizations to meet their obligations, whether due to the potential future impacts of the COVID-19 pandemic, the Russian-Ukrainian conflict or otherwise, could adversely affect clinical development of our products. As a result, we may face additional delaying factors outside our control if these parties do not perform their obligations in a timely fashion. For example, any number of those issues could arise with our clinical trials causing a delay. Delays of this sort could occur for the reasons identified above or other reasons. If we have delays in conducting the clinical trials or obtaining regulatory approvals, our product development costs will increase. For example, we may need to make additional payments to third-party investigators and organizations to retain their services or we may need to pay recruitment incentives. If the delays are significant, our financial results and the commercial prospects for our product candidates will be harmed, and our ability to become profitable will be delayed. Moreover, these third-party investigators and organizations may also have relationships with other commercial entities, some of which may compete with us. If these third-party investigators and organizations assist our competitors at our expense, it could harm our competitive position.

Due to the evolving effects of the COVID-19 pandemic, for several of our development programs, we had experienced and may continue to experience disruption or delay in our ability to enroll and assess patients, maintain patient enrollment, supply study drug, report trial results, or interact with regulators, ethics committees or other important agencies due to limitations in employee resources or otherwise. In addition, some patients may not be able or willing to comply with clinical trial protocols if quarantines impede patient movement or interrupt healthcare services. Similarly, our ability to recruit and retain patients and principal investigators and site staff who, as healthcare providers, may have heightened exposure to COVID-19 may adversely impact our clinical trial operations. In light of the evolving effects of the COVID-19 pandemic, we had taken measures to implement remote and virtual approaches to clinical development, including remote patient monitoring where possible, and if the COVID-19 pandemic continues and persists for an extended period of time, we could experience significant disruptions to our clinical development timelines, which would adversely affect our business, financial condition, results of operations and growth prospects.

We have conducted in the past and are currently conducting clinical trials in the US and outside US including Ukraine and Russia. Recent actions taken by the Russian Federation in Ukraine and surrounding areas have destabilized the region and caused the adoption of comprehensive sanctions by, among others, the EU, the US and the UK, which restrict a wide range of trade and financial dealings with Russia and Russian persons, as well as certain regions in Ukraine. Further, some patients may not be able to comply with clinical trial protocols if the conflict impedes patient movement or interrupts healthcare services. In addition, clinical trial site initiation and patient enrollment may be delayed, and we may not be able to access sites for initiation and monitoring in regions affected by the Russian-Ukrainian conflict including due to the prioritization of hospital resources away from clinical trials or as a result of government-imposed curfews, warfare, violence or other governmental actions or events that restrict movement. We could also experience disruptions in our supply chain or limits our ability to obtain sufficient materials for our drug products in certain regions.

We may not be able to obtain an EUA for fostamatinib for the treatment of hospitalized patients with COVID-19, and, even if we do, absent sNDA approval for that indication, such EUA would be revoked when the COVID-19 emergency terminates.

Based on the results of the NIH/NHLBI-sponsored Phase 2 trial, in May 2021, we filed an EUA for the use of fostamatinib for the treatment of hospitalized patients with COVID-19. In August 2021, the FDA informed us that the clinical data submitted from the NIH/NHLBI-sponsored Phase 2 trial of fostamatinib to treat hospitalized patients suffering from COVID-19 was insufficient for EUA. In July 2022, we completed enrollment with 280 patients in our pivotal FOCUS Phase 3 clinical trial evaluating fostamatinib in high-risk patients hospitalized with COVID-19. The trial had originally targeted a total of 308 patients; however, we determined the trial would be sufficiently powered with 280 patients to potentially provide a clinically meaningful result and determine the efficacy and safety of fostamatinib in hospitalized COVID-19 patients. On November 1, 2022, we announced the top-line results of the clinical trial. The trial approached but did not meet statistical significance in the primary efficacy endpoint. All prespecified secondary endpoints in the trial numerically favored fostamatinib over placebo, including mortality, time to sustained recovery, change in ordinal scale assessment, and number of days in the ICU. We are evaluating the opportunity and discussing next steps with the FDA and in collaboration with our partner, the US Department of Defense.

Section 564 of the FDCA (21 U.S.C. § 360bbb-3) allows the FDA to authorize the shipment of drugs, biological products, or medical devices that either lack required approval, licensure, or clearance (unapproved products), or are approved but are to be used for unapproved ways to diagnose, treat, or prevent serious diseases or conditions in the event of an emergency declaration by the HHS Secretary.

On February 4, 2020, then-HHS Secretary Alex M. Azar II determined that a public health emergency exists for COVID-19 and declared that it justifies the authorization of emergency use of in vitro diagnostics for COVID-19, pursuant to Section 564 of the FDCA. On March 2, 2020, March 24, 2020, and March 27, 2020, Secretary Azar issued corresponding declarations for personal respiratory protective devices; for medical devices, including alternative products used as medical devices; and, for drugs and biological products. The determination and these declarations were published in the Federal Register on February 7, 2020, March 10, 2020, March 27, 2020, and April 1, 2020, respectively.

While the emergency determination and declarations are effective, the FDA may authorize the use of an unapproved product or an unapproved use of an approved product if it concludes that:

- an agent referred to in the emergency declaration could cause a serious or life-threatening disease or condition;
- it is reasonable to believe that the authorized product may be effective in diagnosing, treating, or preventing that disease or condition or a serious or life-threatening disease or condition caused by an approved product or a product marketed under an EUA;
- the known and potential benefits of the authorized product, when used for that disease or condition, outweigh known and potential risks, taking into consideration the material threat of agents identified in the emergency declaration;
- there is no adequate, approved, and available alternative to the authorized product for diagnosing, preventing, or treating the relevant disease or condition;
- any other criteria prescribed by the FDA is satisfied.

Medical products that are granted an EUA are only permitted to commercialize their products under the terms and conditions provided in the authorization. The FDCA authorizes FDA to impose such conditions on an EUA as may be necessary to protect the public health. Consequently, postmarketing requirements will vary across EUAs. In addition, FDA has, on occasion, waived requirements for drugs marketed under an EUA.

Generally, EUAs for unapproved products or unapproved uses of approved products require that manufacturers distribute factsheets for healthcare providers, addressing significant known and potential benefits and risk, and the extent to which benefits and risks are unknown, and the fact that FDA has authorized emergency use; and, distribution of factsheets for recipients of the product, addressing significant known and potential benefits and risk, and the extent to which benefits and risks are unknown, the option to accept or refuse the product, the consequences of refusing, available alternatives and the fact that FDA has authorized emergency use.

Generally, EUAs for unapproved products and, per FDA's discretion, EUAs for unapproved uses of approved products, include requirements for adverse event monitoring and reporting, and other recordkeeping and reporting requirements. Note, however, that approved products are already subject to equivalent requirements.

In addition, the FDA may include various requirements in an EUA as a matter of discretion as deemed necessary to protect the public health, including restrictions on which entities may distribute the product, and how to perform distribution (including requiring that distribution be limited to government entities), restrictions on who may administer the product, requirements for collection and analysis of safety and effectiveness data, waivers of current good manufacturing practices (cGMP), and restrictions applicable to prescription drugs or restricted devices (including advertising and promotion restrictions).

The FDA may revoke an EUA when it is determined that the underlying health emergency no longer exists or warrants such authorization, if the conditions for the issuance of the EUA are no longer met, or if other circumstances make revocation appropriate to protect the public health or safety. We cannot predict how long, if ever, an EUA would remain in place.

It is difficult to predict when the determination and declaration will be revoked or ended, which will impact the marketing of products under existing EUAs and the availability of new EUAs based on the determination and declaration. For example, in January 2023, Congress proposed legislation that would end other COVID-19-related emergency declarations, if passed, and the White House has issued a statement that those declarations will end on May 11, 2023. FDA officials have stated that this will not impact FDA's ability to authorize treatments for emergency use, such that existing EUAs will remain in effect and the agency may continue to issue new EUAs going forward when criteria for issuance are met. This is nonetheless subject to change.

We cannot predict with certainty whether the result of our trial will be sufficient for submission of a second application for an EUA for fostamatinib, and we cannot predict whether FDA will grant an EUA for fostamatinib based on the trial data. We also cannot predict how long, if ever, an EUA would remain in place.

Our COVID-19 product candidate may not successfully protect against variants of the SARS-CoV-2 virus.

As the SARS-CoV-2 virus continues to evolve, new strains of the virus or those that are already in circulation may prove more transmissible or cause more severe forms of COVID-19 disease than the predominant strains to date. There is a risk that any product candidates we develop will not be as effective against variant strains of the SARS-CoV-2 virus expressing variants of the spike protein, particularly strains with mutations in the receptor binding domain and N-terminal domain. Such failure could lead to significant reputational harm, in addition to adversely affecting our financial results.

Public perception of the risk-benefit balance for our COVID-19 product candidates may be affected by adverse events in clinical trials involving our product candidate or other COVID-19 treatments.

Negative perception of the efficacy, safety, or tolerability of any investigational medicines that we develop, or of other products similar to products we are developing, such as fostamatinib for the treatment of COVID-19, could adversely affect our ability to conduct our business, advance our investigational medicines, or obtain regulatory approvals.

Adverse events in clinical trials of our investigational medicines or in clinical trials of others developing similar products, including other COVID-19 treatments, could result in a decrease in the perceived benefit of one or more of our programs, increased regulatory scrutiny, decreased confidence by patients and clinical trial collaborators in our investigational medicines, and less demand for any product that we may develop. If and when they are used in clinical trials, our developmental candidates and investigational medicines could result in a greater quantity of reportable adverse events, including suspected unexpected serious adverse reactions, other reportable negative clinical outcomes, manufacturing reportable events or material clinical events that could lead to clinical delay or hold by the FDA or applicable regulatory authority or other clinical delays, any of which could negatively impact the perception of one or more of our programs, as well as our business as a whole. In addition, responses by US, state, or foreign governments to negative public perception may result in new legislation or regulations that could limit our ability to develop any investigational medicines or commercialize any approved products, obtain or maintain regulatory approval, or otherwise achieve profitability. More restrictive statutory regimes, government regulations, or negative public opinion would have an adverse effect on our business, financial condition, results of operations, and prospects and may delay or impair the development of our investigational medicines and commercialization of any approved products or demand for any products we may develop.

We lack the capability to manufacture compounds for clinical development, and we rely on and intend to continue relying on third parties for commercial supply, manufacturing and distribution if any of our product candidates which receive regulatory approval and we may be unable to obtain required material or product in a timely manner, at an acceptable cost or at a quality level required to receive regulatory approval.

We currently do not have the manufacturing capabilities or experience necessary to produce our products or any product candidates for clinical trials, including fostamatinib in our ongoing clinical trials for certain indications. We currently use one active pharmaceutical ingredient manufacturer and one finished goods manufacturer for each of our products. We do not currently have, nor do we plan to acquire the infrastructure or capability to supply, manufacture or distribute preclinical, clinical or commercial quantities of drug substances or products. For each clinical trial of our unpartnered product candidates, we rely on third-party manufacturers for the active pharmaceutical ingredients, as well as various manufacturers to manufacture starting components, excipients and formulated drug products. Our ability to develop our product candidates, and our ability to commercially supply our products will depend, in part, on our ability to successfully obtain the active pharmaceutical ingredients and other substances and materials used in our product candidates from third parties and to have finished products manufactured by third parties in accordance with regulatory requirements and in sufficient quantities for preclinical and clinical testing and commercialization. If we fail to develop and maintain supply relationships with these third parties, we may be unable to continue to develop or commercialize our product candidates.

We rely and will continue to rely on certain third parties, including those located outside the US, as our limited source of the materials they supply or the finished products they manufacture. The drug substances and other materials used in our product candidates are currently available only from one or a limited number of suppliers or manufacturers and certain of our finished product candidates are manufactured by one or a limited number of contract manufacturers. Any of these existing suppliers or manufacturers may:

- fail to supply us with product on a timely basis or in the requested amount due to unexpected damage to or destruction of facilities or equipment or otherwise;
- fail to increase manufacturing capacity and produce drug product and components in larger quantities and at higher yields in a timely or cost-effective manner, or at all, to sufficiently meet our commercial needs;
- be unable to meet our production demands due to issues related to their reliance on sole-source suppliers and manufacturers;
- supply us with product that fails to meet regulatory requirements;
- become unavailable through business interruption or financial insolvency;
- lose regulatory status as an approved source;
- be unable or unwilling to renew current supply agreements when such agreements expire on a timely basis, on acceptable terms or at all; or
- discontinue production or manufacturing of necessary drug substances or products.

Our current and anticipated future dependence upon these third-party manufacturers may adversely affect our ability to develop and commercialize product candidates on a timely and competitive basis, which could have an adverse effect on sales, results of operations and financial condition. If we were required to transfer manufacturing processes to other third-party manufacturers and we were able to identify an alternative manufacturer, we would still need to satisfy various regulatory requirements. Satisfaction of these requirements could cause us to experience significant delays in receiving an adequate supply of our products and products in development and could be costly. Moreover, we may not be able to transfer processes that are proprietary to the manufacturer, if any. These manufacturers may not be able to produce material on a timely basis or manufacture material at the quality level or in the quantity required to meet our development timelines and applicable regulatory requirements and may also experience a shortage in qualified personnel, including due to the impacts of the COVID-19 pandemic. Our third-party manufacturers import certain materials from China to produce our products. The tensions between the US and China have led to a series of tariffs and sanctions being imposed by the US on imports from China mainland, as well as other business restrictions. Such tensions could adversely impact us and our third-party manufacturers. We may not be able to maintain or renew our existing third-party manufacturing arrangements, or enter into new arrangements, on acceptable terms, or at all. Our third-party manufacturers could terminate or decline to renew our manufacturing arrangements based on their own business priorities, at a time that is costly or inconvenient for us. If we are unable to contract for the production of materials in sufficient quantity and of sufficient quality on acceptable terms, our planned clinical trials may be significantly delayed. Manufacturing delays could postpone the filing of our investigational new drug (IND) applications and/or the initiation or completion of clinical trials that we have currently planned or may plan in the future.

Drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the Drug Enforcement Administration, the European Medicines Agency, national competent authorities in the EU and UK and other federal and state government and regulatory agencies to ensure strict compliance with cGMP and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards and they may not be able to comply. Switching manufacturers may be difficult because the number of potential manufacturers is limited. It may be difficult or impossible for us to find a replacement manufacturer quickly on acceptable terms, or at all. Additionally, if we are required to enter into new supply arrangements, we may not be able to obtain approval from the FDA of any alternate supplier in a timely manner, or at all, which could delay or prevent the clinical development and commercialization of any related product candidates. Failure of our third-party manufacturers or us to comply with applicable regulations, whether due to the impacts of the COVID-19 pandemic or otherwise, could result in sanctions being imposed on us, including fines, civil penalties, delays in or failure to grant marketing approval of our product candidates, injunctions, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products and compounds, operating restrictions and criminal prosecutions, warning or similar letters or civil, criminal or administrative sanctions against us, any of which could adversely affect our business.

Any product for which we have obtained regulatory approval, or for which we obtain approval in the future, is subject to, or will be subject to, extensive ongoing regulatory requirements by the FDA, EMA and other comparable regulatory authorities, and if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, we may be subject to penalties, we may be unable to generate revenue from the sale of such products, our potential for generating positive cash flow will be diminished, and the capital necessary to fund our operations will be increased.

In April 2018, the FDA approved TAVALISSE for the treatment of adult patients with chronic ITP who have had insufficient response to previous treatment. In December 2022, the FDA approved REZLIDHIA for the treatment of adult patients with R/R AML with a susceptible IDH1 mutation as detected by an FDA-approved test. We commercialize TAVALISSE and REZLIDHIA in the US and we have entered into commercialization agreements with third parties to commercialize fostamatinib outside the US. Any product for which we have obtained regulatory approval, or for which we obtain regulatory approval in the future, along with the manufacturing processes and practices, post-approval clinical research, product labeling, advertising and promotional activities for such product, are subject to continual requirements of, and review by, the FDA, the EMA and other comparable international regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, cGMP requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians, import and export requirements and recordkeeping. If we or our suppliers encounter manufacturing, quality or compliance difficulties with respect to our products or any of our product candidates, when and if approved, whether due to the impacts of the COVID-19 pandemic (including as a result of disruptions of global shipping and the transport of products) or otherwise, we may be unable to obtain or maintain regulatory approval or meet commercial demand for such products, which could adversely affect our business, financial conditions, results of operations and growth prospects.

Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved labeling. Thus, we will not be able to promote any products we develop for indications or uses for which they are not approved.

In addition, the FDA often requires post-marketing testing and surveillance to monitor the effects of products. The FDA, the EMA and other comparable international regulatory agencies may condition approval of our product candidates on the completion of such post-marketing clinical studies. These post-marketing studies may suggest that a product causes undesirable side effects or may present a risk to the patient. Additionally, the FDA may require REMS to help ensure that the benefits of the drug outweigh its risks. A REMS may be required to include various elements, such as a medication guide or patient package insert, a communication plan to educate healthcare providers of the drug's risks, limitations on who may prescribe or dispense the drug, requirements that patients enroll in a registry or undergo certain health evaluations or other measures that the FDA deems necessary to ensure the safe use of the drug.

Discovery after approval of previously unknown problems with any of our products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in actions such as:

- restrictions on our ability to conduct clinical trials, including full or partial clinical holds on ongoing or planned trials;
- restrictions on product manufacturing processes;
- restrictions on the marketing of a product;
- restrictions on product distribution;
- requirements to conduct post-marketing clinical trials;
- untitled or warning letters or other adverse publicity;
- withdrawal of products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;

- recall of products;
- refusal to permit the import or export of our products;
- product seizure;
- fines, restitution or disgorgement of profits or revenue;
- refusal to allow us to enter into supply contracts, including government contracts;
- injunctions; or
- imposition of civil or criminal penalties.

If such regulatory actions are taken, the value of our company and our operating results will be adversely affected. Additionally, if the FDA, the EMA or any other comparable international regulatory agency withdraws its approval of a product that is or may be approved, we will be unable to generate revenue from the sale of that product in the relevant jurisdiction, our potential for generating positive cash flow will be diminished and the capital necessary to fund our operations will be increased. Accordingly, we continue to expend significant time, money and effort in all areas of regulatory compliance, including manufacturing, production, product surveillance, post-marketing studies and quality control.

If any of our third-party contractors fail to perform their responsibilities to comply with FDA rules and regulations, the marketing and sales of our products could be delayed and we may be subject to enforcement action, which could decrease our revenues.

Conducting our business requires us to manage relationships with third-party contractors. As a result, our success depends partially on the success of these third parties in performing their responsibilities to comply with FDA rules and regulations. Although we pre-qualify our contractors and we believe that they are fully capable of performing their contractual obligations, we cannot directly control the adequacy and timeliness of the resources and expertise that they apply to these activities.

If any of our partners or contractors fail to perform their obligations in an adequate and timely manner, or fail to comply with the FDA's rules and regulations, then the marketing and sales of our products could be delayed. The FDA may also take enforcement actions against us based on compliance issues identified with our contractors. If any of these events occur, we may incur significant liabilities, which could decrease our revenues. For example, sales and medical science liaison or MSL personnel, including contractors, must comply with FDA requirements for the advertisement and promotion of products.

Fast track designation by the FDA may not actually lead to a faster development or regulatory review or approval process and does not assure FDA approval of our product candidates.

If a product candidate is intended for the treatment of a serious or life-threatening condition and the product candidate demonstrates the potential to address unmet medical need for this condition, the sponsor may apply for FDA fast track designation. Fast track designation applies to the combination of the product and the specific indication for which it is being studied. The sponsor of a fast track product has opportunities for more frequent interactions with the review team during product development, and the FDA may consider for review sections of the NDA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the NDA, the FDA agrees to accept sections of the NDA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA.

However, fast track designation does not change the standards for approval and does not ensure that the product candidate will receive marketing approval or that approval will be granted within any particular timeframe. As a result, while the FDA has granted fast track designation to fostamatinib for the treatment of wAIHA and/or we may seek and receive fast track designation for our future product candidates, we may not experience a faster development process, review or approval compared to conventional FDA procedures. In addition, the FDA may withdraw fast track designation if it believes that the designation is no longer supported by data from our clinical development program. Fast track designation alone does not guarantee qualification for the FDA's priority review procedures.

If we are unable to obtain regulatory approval to market products in the US and foreign jurisdictions, we will not be permitted to commercialize products we or our collaborative partners may develop.

We cannot predict whether regulatory clearance will be obtained for any product that we, or our collaborative partners, hope to develop. Satisfaction of regulatory requirements typically takes many years, is dependent upon the type, complexity and novelty of the product and requires the expenditure of substantial resources. Of particular significance to us are the requirements relating to research and development and testing.

Before commencing clinical trials in humans in the US, we, or our collaborative partners, will need to submit and receive approval from the FDA of an IND application. Clinical trials are subject to oversight by institutional review boards and the FDA and:

- must be conducted in conformance with the FDA's good clinical practices and other applicable regulations;
- must meet requirements for institutional review board oversight;
- must meet requirements for informed consent;
- are subject to continuing FDA and regulatory oversight;
- may require large numbers of test subjects; and
- may be suspended by us, our collaborators or the FDA at any time if it is believed that the subjects participating in these trials are being exposed to unacceptable health risks or if the FDA finds deficiencies in the IND or the conduct of these trials.

While we have stated that we intend to file additional INDs for future product candidates, this is only a statement of intent, and we may not be able to do so because we may not be able to identify potential product candidates. In addition, the FDA may not approve any IND we or our collaborative partners may submit in a timely manner, or at all.

Before receiving FDA approval to market a product, we must demonstrate with substantial clinical evidence that the product is safe and effective in the patient population and the indication that will be treated. Data obtained from preclinical and clinical activities are susceptible to varying interpretations that could delay, limit or prevent regulatory approvals. In addition, delays or rejections may be encountered based upon additional government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials and FDA regulatory review. Failure to comply with applicable FDA or other applicable regulatory requirements may result in criminal prosecution, civil penalties, recall or seizure of products, total or partial suspension of production or injunction, adverse publicity, as well as other regulatory action against our potential products or us. Additionally, we have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approval.

If regulatory approval of a product is granted, this approval will be limited to those indications or disease states and conditions for which the product is demonstrated through clinical trials to be safe and efficacious. We cannot assure you that any compound developed by us, alone or with others, will prove to be safe and efficacious in clinical trials and will meet all of the applicable regulatory requirements needed to receive marketing approval.

Outside the US, our ability, or that of our collaborative partners, to market a product is contingent upon receiving a marketing authorization from the appropriate regulatory authorities. This foreign regulatory approval process typically includes all of the risks and costs associated with FDA approval described above and may also include additional risks and costs, such as the risk that such foreign regulatory authorities, which often have different regulatory and clinical trial requirements, interpretations and guidance from the FDA, may require additional clinical trials or results for approval of a product candidate, any of which could result in delays, significant additional costs or failure to obtain such regulatory approval. There can be no assurance, however, that we or our collaborative partners will not have to provide additional information or analysis, or conduct additional clinical trials, before receiving approval to market product candidates.

We may be unable to expand our product pipeline, which could limit our growth and revenue potential.

Our business is focused on the development and commercialization of novel therapies that significantly improve the lives of patients with hematologic disorders and cancer. In this regard, we are pursuing internal drug discovery efforts with the goal of identifying new product candidates to advance into clinical trials. Internal discovery efforts to identify new product candidates require substantial technical, financial and human resources. These internal discovery efforts may initially show promise in identifying potential product candidates, yet ultimately fail to yield product candidates for clinical development for a number of reasons. For example, potential product candidates may, on later stage clinical trial, be shown to have inadequate efficacy, harmful side effects, suboptimal pharmaceutical profiles or other characteristics suggesting that they are unlikely to be commercially viable products.

Apart from our internal discovery efforts, our strategy to expand our development pipeline is also dependent on our ability to successfully identify and acquire or in-license relevant product candidates. In July 2022, we entered into a license and transition services agreement with Forma for an exclusive license to develop, manufacture and commercialize olutasidenib, Forma's proprietary inhibitor of mIDH1, for any uses worldwide, including for the treatment of AML and other malignancies. Forma submitted an NDA for olutasidenib to the FDA with PDUFA action date for the application of February 15, 2023. On December 1, 2022, the FDA approved REZLIDHIA capsules for the treatment of adult patients with R/R AML with a susceptible IDH1 mutations as detected by and FDA-approved test. REZLIDHIA is our second commercial product and is highly synergistic with our existing hematology-oncology focused commercial and medical affairs infrastructure. The in-licensing and acquisition of product candidates is a highly competitive area, and many other companies are pursuing the same or similar product candidates to those that we may consider attractive. In particular, larger companies with more well-established and diverse revenue streams may have a competitive advantage over us due to their size, financial resources and more extensive clinical development and commercialization capabilities. Furthermore, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We may also be unable to in-license or acquire additional relevant product candidates on acceptable terms that would allow us to realize an appropriate return on our investment. If we are unable to develop suitable product candidates through internal discovery efforts, whether due to the impacts of the COVID-19 pandemic or otherwise, or if we are unable to successfully obtain rights to additional suitable product candidates, our business and prospects for growth could suffer. Even if we succeed in our efforts to obtain rights to suitable product candidates, the competitive business environment may result in higher acquisition or licensing costs, and our investment in these potential products will remain subject to the inherent risks associated with the development and commercialization of new medicines. In certain circumstances, we may also be reliant on the licensor for the continued development of the in-licensed technology and their efforts to safeguard their underlying intellectual property.

With respect to acquisitions, we may not be able to integrate the target company successfully into our existing business, maintain the key business relationships of the target, or retain key personnel of an acquired business. Furthermore, we could assume unknown or contingent liabilities or incur unanticipated expenses. Any acquisitions or investments made by us also could result in our spending significant amounts, issuing dilutive securities, assuming or incurring significant debt obligations and contingent liabilities, incurring large one-time expenses and acquiring intangible assets that could result in significant future amortization expense and significant write-offs, any of which could harm our operating results.

We have obtained orphan drug designation from the FDA for fostamatinib for the treatment of ITP and wAIHA, but we may not be able to obtain or maintain orphan drug designation or exclusivity for fostamatinib for the treatment of ITP, wAIHA or our other product candidates, or we may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity.

We have obtained orphan drug designation in the US for fostamatinib for the treatment of ITP and wAIHA. We may seek orphan drug designation for other product candidates in the future. Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biologic intended to treat a rare disease or condition, which is defined as one occurring in a patient population of fewer than 200,000 in the US, or a patient population greater than 200,000 in the US where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the US. In the US, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. In addition, 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 drug exclusivity, which means that the FDA may not approve any other applications, including a full NDA, to market the same drug for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or where the manufacturer is unable to assure sufficient product quantity. At this time, we do not have nor will we seek to apply for orphan drug designation in the EU or the UK in the foreseeable future.

We cannot assure you that any future application for orphan drug designation with respect to any other product candidate will be granted. If we are unable to obtain orphan drug designation with respect to other product candidates in the US, we will not be eligible to obtain the period of market exclusivity that could result from orphan drug designation or be afforded the financial incentives associated with orphan drug designation. Even though we have received orphan drug designation for fostamatinib for the treatment of ITP and wAIHA in the US, we may not be the first to obtain marketing approval for the orphan-designated indication due to the uncertainties associated with developing pharmaceutical products or we might not maintain our orphan drug designation. In addition, exclusive marketing rights in the US for fostamatinib for the treatment of ITP, wAIHA or any future product candidate may be limited if we seek approval for an indication broader than the orphan-designated indication or may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. Further, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs with different active moieties can be approved for the same condition. Even after an orphan product is approved, the FDA can subsequently approve the same drug with the same active moiety for the same condition if the FDA concludes that the later drug is safer, more effective, or makes a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process.

In addition, Congress is considering updates to the orphan drug provisions of the FDCA in response to a recent 11th Circuit decision. Any changes to the orphan drug provisions could change our opportunities for, or likelihood of success in obtaining, orphan drug exclusivity and would materially adversely affect our business, financial condition, results of operations, cash flows and prospects.

Risks Related to Commercialization

Our prospects are highly dependent on our commercial products. To the extent that the commercial success of our products in the US is diminished or is not commercially successful, our business, financial condition and results of operations may be adversely affected, and the price of our common stock may decline.

TAVALISSE is our first drug that has been approved for sale in the US and Europe for patients with chronic ITP. REZLIDHIA is our second drug product which was recently approved by the FDA for the treatment of adult patients with R/R AML with susceptible IDH1 mutations as detected by an FDA-approved test, and began its commercialization in December 2022. We are focusing a significant portion of our activities and resources on our products, and we believe our prospects are highly dependent on, and a significant portion of the value of our company relates to, our ability to sustain successful commercialization of our products in the US. We have also entered into exclusive commercialization agreements with third parties to commercialize fostamatinib outside the US, and we plan to further enter partnership with existing or other third parties to commercialize fostamatinib and olutasidenib outside the US in the future.

Sustained successful commercialization of our products is subject to many risks and uncertainties, including the impact of the COVID-19 pandemic on the successful commercialization in the US, as well as the successful commercialization efforts for our products through our collaborative partners. There are numerous examples of unsuccessful product launches and failures to meet high expectations of market potential, including by pharmaceutical companies with more experience and resources than us.

As we continue to build out our commercial team, there are many factors that could cause the commercialization of our products to be unsuccessful, including a number of factors that are outside our control. The commercial success of our products depends on the extent to which patients and physicians accept and adopt our products to treat the related diseases. We also do not know how physicians, patients and payors will respond to our future price increases of our products. Physicians may not prescribe our products and patients may be unwilling to use our products if coverage is not

provided or reimbursement is inadequate to cover a significant portion of the cost. Our products compete, and may in the future compete, with currently existing therapies, including generic drugs, and products currently under development. Our competitors, particularly large pharmaceutical companies, may deploy more resources to market, sell and distribute their products. If our efforts are not appropriately resourced to adequately promote our products, the commercial potential of our sales may be diminished. Additionally, any negative development for fostamatinib in clinical development in additional indications, such as in the clinical trials of fostamatinib in COVID-19 patients, may adversely impact the commercial results and potential of fostamatinib. Thus, significant uncertainty remains regarding the commercial potential of fostamatinib.

Market acceptance of fostamatinib will depend on a number of factors, including:

- the timing of market introduction of the product as well as competitive products;
- the clinical indications for which the product is approved;
- acceptance by physicians, the medical community and patients of the product as a safe and effective treatment;
- potential future impacts, if any, due to the evolving effects of the COVID-19 pandemic and the Russian-Ukrainian conflict;
- the ability to distinguish safety and efficacy from existing, less expensive generic alternative therapies, if any;
- the convenience of prescribing, administrating and initiating patients on the product and the length of time the patient is on the product;
- the potential and perceived value and advantages of the product over alternative treatments;
- the cost of treatment in relation to alternative treatments, including any similar generic treatments;
- pricing and the availability of coverage and adequate reimbursement by third-party payors and government authorities;
- a positive HTA assessment concluding that the product is cost-effective and the HTA bodies issuing a positive recommendation for the use of the product as a first or second line of treatment for the granted therapeutic indication;
- the prevalence and severity of adverse side effects; and
- the effectiveness of sales and marketing efforts.

If we are unable to sustain anticipated level of sales growth from our products, or if we fail to achieve anticipated product royalties and collaboration milestones, we may need to reduce our operating expenses, access other sources of cash or otherwise modify our business plans, which could have a negative impact on our business, financial condition and results of operations. For example, during 2021, we experienced lower than anticipated sales of our products due to continuing impacts of physician and patient access issues created by the COVID-19 pandemic. From time to time, our net product sales are negatively impacted by the decrease in level of inventories remaining at our distribution channels.

We also may not be successful entering into arrangements with third parties to sell and market one or more of our product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties, including Kissei's development and commercialization of fostamatinib in all indications in Japan, China, Taiwan, and the Republic of Korea, Grifols' commercialization of fostamatinib in Europe and Turkey, Medison for future commercialization of fostamatinib in Canada and Israel, and Knight for commercialization of fostamatinib in Latin America. As a consequence of our license agreements with Kissei, Grifols, Medison and Knight, we rely heavily upon their regulatory, commercial, medical affairs, market access and other expertise and resources for

commercialization of fostamatinib in their respective territories outside of the US. We cannot control the amount of resources that our partners dedicate to the commercialization of fostamatinib, and our ability to generate revenues from the commercialization of fostamatinib by our partners depends on their ability to achieve market acceptance of fostamatinib in its approved indications in their respective territories.

Furthermore, foreign sales of fostamatinib by our partners could be adversely affected by the imposition of governmental controls, political and economic instability, outbreaks of pandemic diseases, such as the COVID-19 pandemic, trade restrictions or barriers and changes in tariffs and escalating global trade and political tensions. For example, the COVID-19 pandemic has resulted in increased travel restrictions and extended shutdowns of certain businesses in the US and around the world. If our collaborators are unable to successfully complete clinical trials, delay commercialization of fostamatinib or do not invest the resources necessary to successfully commercialize fostamatinib in international territories where it has been approved, this could reduce the amount of revenue we are due to receive under these license agreements, resulting in harm to our business and operations. If we do not establish and maintain sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates.

Even if we, or any of our collaborative partners, are able to continue to commercialize our products or any product candidate that we, or they, develop, the product may become subject to unfavorable pricing regulations, third-party payor reimbursement practices or labeling restrictions, all of which may vary from country to country and any of which could harm our business.

The commercial success of any product for which we have obtained regulatory approval, or for which we obtain regulatory approval in the future will depend substantially on the extent to which the costs of our product or product candidates are or will be paid by third-party payors, including government health care programs and private health insurers. There is a significant trend in the health care industry by public and private payors to contain or reduce their costs, including by taking the following steps, among others: decreasing the portion of costs payors will cover, ceasing to provide full payment for certain products depending on outcomes, and/or not covering certain products at all. If payors implement any of the foregoing with respect to our products, it would have an adverse impact on our revenue and results of operations. If coverage is not available, or reimbursement is limited, we, or any of our collaborative partners, may not be able to successfully commercialize our products or any of our product candidates in some jurisdictions. Even if coverage is provided, the approved reimbursement amount may not be at a rate that covers our costs, including research, development, manufacture, sale and distribution. In the US, no uniform policy of coverage and reimbursement for products exists among third-party payors; therefore, coverage and reimbursement levels 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 may require us to provide scientific, clinical or other support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

There is significant uncertainty related to third-party payor coverage and reimbursement of newly approved drugs. Marketing approvals, pricing and reimbursement for new drug products vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed, which could delay market entry (or, if pricing is not approved, we may be unable to sell at all in a country where we have received regulatory approval for a product. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some countries, the proposed pricing for a drug must be approved before it may be lawfully marketed). In addition, authorities in some countries impose additional obligations, such as HTAs, which assess the performance of a drug in comparison with its cost. The outcome of HTA assessments is judged on a national basis and some payors may not reimburse the use of our products or may reduce the rate of reimbursement for our products and as a result, revenue from such products may decrease.

In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we, or any of our collaborative partners, might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay commercial launch of the product, possibly for lengthy time periods, which may negatively impact the revenues we are able to generate from the sale of the product in that country. In particular, we cannot predict to what extent the evolving effects of the COVID-19 pandemic, depending on its scale and duration, may continue to disrupt global healthcare systems and access to our products or result in a widespread loss of individual health insurance coverage due to unemployment, a shift from commercial payor coverage to government payor coverage, or an increase in demand for patient assistance and/or free

drug programs, any of which would adversely affect access to and demand for our products and our net sales. Adverse pricing limitations may also hinder our ability or the ability of any future collaborators to recoup our or their investment in one or more product candidates, even if our product candidates obtain marketing approval. Further, even if favorable coverage and reimbursement status is attained for one or more products for which we or our collaborative partners receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

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. Therefore, our ability, and the ability of any of our collaborative partners, to successfully commercialize our products or any of our product candidates will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from third-party payors.

Additionally, the labeling ultimately approved for any of our product candidates for which we have or may obtain regulatory approval may include restrictions on their uses and may be subject to ongoing FDA or international regulatory authority requirements governing the labeling, packaging, storage, distribution, safety surveillance, advertising, promotion, record-keeping and reporting of safety and other post-market information. If we or any of our collaborative partners do not timely obtain or comply with the labeling approval by the FDA or international regulatory authorities on any of our product candidates, it may delay or inhibit our ability to successfully commercialize our products and generate revenues.

If we are unable to successfully market and distribute our products and retain experienced commercial personnel, our business will be substantially harmed.

We currently have limited experience in marketing and selling pharmaceutical products. As a result, we will be required to expend significant time and resources to maintain a sales force that is credible and compliant with applicable laws in marketing our products. In addition, we must continually train our sales force to ensure that an appropriate and compliant message about our products is being delivered. If we are unable to effectively train our sales force and equip them with compliant and effective materials, including medical and sales literature to help them appropriately inform and educate health care providers regarding the potential benefits and proper administration of our products, our efforts to successfully commercialize our products could be put in jeopardy, which would negatively impact our ability to generate product revenues.

We have established our distribution, sales, marketing and market access capabilities, all of which will be necessary to successfully commercialize our products. As a result, we will be required to expend significant time and resources to market, sell, and distribute our products to hematologists and hematologist-oncologists. There is no guarantee that the marketing strategies we have developed, or the distribution, sales, marketing and market access capabilities that we have developed will be successful. Particularly, we are dependent on third-party logistics, specialty pharmacies and distribution partners in the distribution of our products. If they are unable to perform effectively or if they do not provide efficient distribution of the medicine to patients, our business may be harmed. In addition, we actively participate in medical conferences and exhibits, such as the ASCO and ASH Annual Meeting & Exposition that are significant opportunities for us to educate physicians and key opinion leaders about our products. ASCO was held in Chicago, Illinois as well as virtually in June 2022, and ASH was held in New Orleans, Louisiana as well as virtually in December 2022. In the future, other key conferences may be held live, virtually, postponed or cancelled. Such disruptions may prevent us from effectively educating the prescribing physicians and key opinion leaders about our products which would negatively impact utilization of our products and our results of operations and growth prospects could be adversely affected.

Maintaining our sales, marketing, market access and product distribution capabilities requires significant resources, and there are numerous risks involved with managing our commercial team, including our potential inability to successfully train, retain and incentivize adequate numbers of qualified and effective sales and marketing personnel. We are also competing for talent with numerous commercial and pre-commercial-stage oncology-focused biotechnology companies seeking to build out their commercial organizations, as well as other large pharmaceutical organizations that have extensive, well-funded and more experienced sales and marketing operations, and we may be unable to maintain or adequately scale our commercial organization as a result of such competition. If we cannot maintain effective sales, marketing, market access and product distribution capabilities, whether as a result of the COVID-19 pandemic or otherwise, we may be unable to realize the commercial potential of our products. Also, to the extent that the commercial opportunities for our products grow over time, we may not properly judge the requisite size and experience of our

current commercialization teams or the level of distribution necessary to market and sell our products, which could have an adverse impact on our business, financial condition and results of operations.

We may not be able to successfully develop or commercialize our product candidates if problems arise in the clinical testing and approval process.

The activities associated with the research, development and commercialization of fostamatinib and other product candidates in our pipeline must undergo extensive clinical trials, which can take many years and require substantial expenditures, subject to extensive regulation by the FDA and other regulatory agencies in the US and by comparable authorities in other countries. The process of obtaining regulatory approvals in the US and other foreign jurisdictions is expensive, and lengthy, if approval is obtained at all.

Our clinical trials may fail to produce results satisfactory to the FDA or regulatory authorities in other jurisdictions. The regulatory process also requires preclinical testing, and data obtained from preclinical and clinical activities are susceptible to varying interpretations. The FDA has substantial discretion in the approval process and may refuse to approve any NDA or sNDA and decide that our data is insufficient for approval and require additional preclinical, clinical or other studies. Varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent regulatory approval of fostamatinib for any individual, additional indications. For example, in June 2022, we announced that the top-line results from our Phase 3 trial in wAIHA did not demonstrate statistical significance in the primary efficacy endpoint of durable hemoglobin response in the overall study population. While we conducted an in-depth analysis of these data to better understand differences in patient characteristics and outcomes and submitted these findings to the FDA, in October 2022, we announced that we received guidance from the FDA's of these findings. Based on the result of the trial and the guidance from the FDA, we did not file an sNDA for wAIHA.

Due to the evolving effects of COVID-19 pandemic, it is also possible that we could experience delays in the timing of our interactions with regulatory authorities due to absenteeism by governmental employees or the diversion of regulatory authority efforts and attention to approval of other therapeutics or other activities related to COVID-19 or other public health emergencies, which could delay or limit our ability to make planned regulatory submissions or develop and commercialize our product candidates on anticipated timelines.

In addition, delays or rejections may be encountered based upon changes in regulatory policy for product approval during the period of product development and regulatory agency review, which may cause delays in the approval or rejection of an application for fostamatinib or for our other product candidates.

Commercialization of our product candidates depends upon successful completion of extensive preclinical studies and clinical trials to demonstrate their safety and efficacy for humans. Preclinical testing and clinical development are long, expensive and uncertain processes.

In connection with clinical trials of our product candidates, we may face the following risks among others:

- the product candidate may not prove to be effective;
- the product candidate may cause harmful side effects;
- the clinical results may not replicate the results of earlier, smaller trials;
- we or third parties with whom we collaborate, may be significantly impacted by the evolving impacts of the COVID-19 pandemic;
- we, or the FDA or similar foreign regulatory authorities, may delay, terminate or suspend the trials;
- our results may not be statistically significant;
- patient recruitment and enrollment may be slower than expected;
- patients may drop out of the trials or otherwise not enroll; and
- regulatory and clinical trial requirements, interpretations or guidance may change.

We do not know whether we will be permitted to undertake clinical trials of potential products beyond the trials already concluded and the trials currently in process. It will take us or our collaborative partners several years to complete any such testing, and failure can occur at any stage of testing. Interim results of trials do not necessarily predict final results, and acceptable results in early trials may not be repeated in later trials. A number of companies in the pharmaceutical industry, including biotechnology companies, have suffered significant setbacks in advanced clinical trials, even after achieving promising results in earlier trials.

General Risk Factors

Global economic conditions could adversely impact our business.*

Deterioration in the macroeconomic economy or financial services industry could lead to losses or defaults by our customers or suppliers, which in turn, could have a material adverse effect on our current and/or projected business operations and results of operations and financial condition. The global credit and financial markets are currently, and have from time to time experienced extreme volatility and disruptions, including severely diminished liquidity and credit availability, rising interest and inflation rates, declines in consumer confidence, declines in economic growth, increases in unemployment rates and uncertainty about economic stability. More recently, the closures of SVB and Signature Bank and their placement into receivership with the FDIC created bank-specific and broader financial institution liquidity risk and concerns. On March 12, 2023, federal regulators announced that the FDIC would complete its resolution of SVB in a manner that fully protects all depositors. On March 27, 2023, FCB announced that it has entered into an agreement with FDIC to purchase all of the asset and liabilities of SVB. Customers of SVB automatically become customers of FCB following the acquisition. We maintain a depository relationship with SVB/FCB. To date and as of March 31, 2023, the amount of our cash held on deposit with SVB/FCB was not material with respect our total cash, cash equivalents and short-term investments. All of our cash deposits with SVB/FCB are accessible to us, and we do not anticipate any losses with respect to such funds. Since the March 2023 financial institution failure, there has been a heightened risk and greater focus on the potential failures of other banks in the future. If these banks fail in the future, we may not be able to immediately (or ever) recover our cash in excess of the FDIC insured limits which would adversely impact our operating liquidity and could negatively impact our operations, results of operations and financial performance. Although we believe our exposure is limited, if in the future any of the financial institutions that we maintain depository or lending relationships were to be placed into receivership, we may be unable to access such funds to meet our working capital requirements. In addition, if any of our customers, suppliers or other parties with whom we conduct business are unable to access funds, such parties' ability to pay their obligations to us or to enter into new commercial arrangements requiring additional payments to us could be adversely affected. Although we assess our banking and customer relationships as we believe necessary or appropriate, our access to funding sources and other credit arrangements in amounts adequate to finance or capitalize our current and projected future business operations could be significantly impacted by factors that affect us, the financial institutions with which we credit agreement or arrangements directly, or the financial services industry or economy in general.

In addition, any further deterioration in the US economy would likely affect the operation of our business and ability to raise capital. In addition, US debt ceiling and budget deficit concerns have increased the possibility of additional credit-rating downgrades and economic slowdowns, or a recession in the US. Although US lawmakers passed legislation to raise the federal debt ceiling on multiple occasions, ratings agencies have lowered or threatened to lower the long-term sovereign credit rating on the US. The impact of this or any further downgrades to the US government's sovereign credit rating or its perceived creditworthiness could adversely affect the US and global financial markets and economic conditions.

The financial markets and the global economy may also be adversely affected by the current or anticipated impact of military conflict, including the ongoing conflict between Russia and Ukraine, terrorism or other geopolitical events. Sanctions imposed by the US and other countries in response to such conflicts, including the one in Ukraine, may also adversely impact the financial markets and the global economy, and any economic countermeasures by the affected countries or others could exacerbate market and economic instability.

The US government has indicated its intent to alter its approach to international trade policy and in some cases to renegotiate, or potentially terminate, certain existing bilateral or multi-lateral trade agreements and treaties with foreign countries. In addition, the US government has initiated or is considering imposing tariffs on certain foreign goods. Related to this action, certain foreign governments, including China, have instituted or are considering imposing

tariffs on certain US goods. It remains unclear what the US Administration or foreign governments will or will not do with respect to tariffs or other international trade agreements and policies. A trade war or other governmental action related to tariffs or international trade agreements or policies has the potential to disrupt our research activities, affect our suppliers and/or the US economy or certain sectors thereof and, thus, could adversely impact our businesses.

Shareholder activism could cause material disruption to our business.

Publicly traded companies have increasingly become subject to campaigns by our stakeholders, including investors, and more recently regulatory organizations advocating corporate actions such as actions related to environment, social and governance (ESG) matters, impacts of climate change, financial restructuring, increased borrowing, dividends, share repurchases and even sales of assets or the entire company. Responding to proxy contests and other actions by such activist investors or others in the future could be costly and time-consuming, disrupt our operations and divert the attention of our Board of Directors and senior management from the pursuit of our business strategies, which could adversely affect our results of operations and financial condition.

Anti-takeover provisions in our charter documents and under Delaware law may make an acquisition of us, which may be beneficial to our stockholders, more difficult.

Provisions of our amended and restated certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us, even if doing so would benefit our stockholders. These provisions:

- establish that members of the board of directors may be removed only for cause upon the affirmative vote of stockholders owning a majority of our capital stock;
- authorize the issuance of "blank check" preferred stock that could be issued by our board of directors to increase the number of outstanding shares and thwart a takeover attempt;
- limit who may call a special meeting of stockholders;
- prohibit stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders;
- establish advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings;
- provide for a board of directors with staggered terms; and
- provide that the authorized number of directors may be changed only by a resolution of our board of directors.

In addition, Section 203 of the Delaware General Corporation Law (DGCL), which imposes certain restrictions relating to transactions with major stockholders, may discourage, delay or prevent a third party from acquiring us.

Our bylaws designate a state or federal court located within the State of Delaware as the sole and exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our current or former directors, officers, stockholders, or other employees.

Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of us under Delaware law, (ii) any action asserting a claim of breach of a fiduciary duty owed by any current or former director, officer, or other employee of the Company to us or our stockholders, (iii) any action asserting a claim against us or any of our directors, officers, or other employees arising pursuant to any provision of the DGCL or our amended and restated certificate of incorporation and bylaws (as either may be amended from time to time), (iv) any action asserting a claim against us governed by the internal affairs doctrine, or (v) any other action asserting an "internal corporate claim," as defined under Section 115 of the DGCL. The forgoing provisions do not apply to any claims arising under the Securities Act and, unless we consent in writing to the selection of an alternative forum, the federal district

courts of the United States will be the sole and exclusive forum for resolving any action asserting a claim arising under the Securities Act.

These choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our current or former directors, officers, or other employees, which may discourage lawsuits with respect to such claims. There is uncertainty as to whether a court would enforce such provisions, and the enforceability of similar choice of forum provisions in other companies' charter documents has been challenged in legal proceedings. It is possible that a court could find these types of provisions to be inapplicable or unenforceable, and if a court were to find the choice of forum provision to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, results of operations, and financial condition.

Increasing use of social media could give rise to liability and may harm our business.

We and our employees are increasingly utilizing social media tools and our website as a means of communication. Despite our efforts to monitor evolving social media communication guidelines and comply with applicable laws, regulations and national and EU codes of conduct, there is risk that the unauthorized use of social media by us or our employees to communicate about our products or business, sharing of publications in unintended audiences in other jurisdictions, or any inadvertent promotional activity or disclosure of material, nonpublic information through these means, may cause us to be found in violation of applicable laws and regulations, which may give rise to liability and result in harm to our business. In addition, there is also risk of inappropriate disclosure of sensitive information, which could result in significant legal and financial exposure and reputational damages that could potentially have an adverse impact on our business, financial condition and results of operations. Furthermore, negative posts or comments about us or our products on social media could seriously damage our reputation, brand image and goodwill.

Our research and development efforts will be seriously jeopardized if we are unable to attract and retain key employees and relationships.

Our success depends on the continued contributions of our principal management and scientific personnel and on our ability to develop and maintain important relationships with leading academic institutions, scientists and companies in the face of intense competition for such personnel. In particular, our research programs depend on our ability to attract and retain highly skilled chemists, other scientists, and development, regulatory and clinical personnel. If we lose the services of any of our key personnel, our research and development efforts could be seriously and adversely affected. Our employees can terminate their employment with us at any time.

Our facilities are located near known earthquake fault zones, and the occurrence of an earthquake or other catastrophic disaster could cause damage to our facilities and equipment, which could require us to cease or curtail operations.

Our facilities are located in the San Francisco Bay Area near known earthquake fault zones and are vulnerable to significant damage from earthquakes. We are also vulnerable to damage from other types of disasters, including fires, floods, power loss, communications failures and similar events. If any disaster were to occur, our ability to operate our business at our facilities would be seriously, or potentially completely, impaired, and our research could be lost or destroyed. In addition, the unique nature of our research activities and of much of our equipment could make it difficult for us to recover from a disaster. The insurance we maintain may not be adequate to cover our losses resulting from disasters or other business interruptions.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

The exhibits listed on the accompanying index to exhibits are filed or incorporated by reference (as stated therein) as part of this Quarterly Report on Form 10-Q.

Exhibit Number	Description of Document
3.1	Amended and Restated Certificate of Incorporation. (1)
3.2	Amended and Restated Bylaws. (2)
3.3	Certificate of Amendment to the Amended and Restated Certificate of Incorporation. (3)
4.1	Form of warrant to purchase shares of common stock. (4)
4.2	Specimen Common Stock Certificate. (5)
4.3	Warrant issued to HCP BTC, LLC for the purchase of shares of common stock. (6)
31.1#	Certification required by Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act.
31.2#	Certification required by Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act.
32.1*#	Certification required by Rule 13a-14(b) or Rule 15d-14(b) of the Exchange Act and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. 1350).
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.LAB	Inline XBRL Taxonomy Extension Labels Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

Filed herewith

* *The certifications attached as Exhibit 32.1 accompany this Quarterly Report on Form 10-Q pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed "filed" by the registrant for purposes of Section 18 of the Exchange Act.*

(1) Filed as an exhibit to Rigel's Current Report on Form 8-K dated June 24, 2003, and incorporated herein by reference.

(2) Filed as an exhibit to Rigel's Current Report on Form 8-K dated November 3, 2022, and incorporated herein by reference.

(3) Filed as an exhibit to Rigel's Current Report on Form 8-K dated May 18, 2018, and incorporated herein by reference.

(4) Filed as an exhibit to Rigel's Registration Statement on Form S-1 (No. 333-45864), filed on September 15, 2000, as amended, and incorporated herein by reference.

(5) Filed as an exhibit to Rigel's Current Report on Form 10-K dated June 24, 2003, and incorporated herein by reference.

(6) Filed as an exhibit to Rigel's Quarterly Report on Form 10-Q for the quarter ended March 31, 2009, and incorporated herein by reference.

SIGNATURES

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

RIGEL PHARMACEUTICALS, INC.

By: /s/ RAUL R. RODRIGUEZ
Raul R. Rodriguez
Chief Executive Officer
(Principal Executive Officer)

Date: May 2, 2023

By: /s/ DEAN L. SCHORNO
Dean L. Schorno
Chief Financial Officer
(Principal Financial Officer)

Date: May 2, 2023

Exhibit 31.1

CERTIFICATION

I, Raul R. Rodriguez, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Rigel Pharmaceuticals, 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: May 2, 2023

/s/ RAUL R. RODRIGUEZ
Raul R. Rodriguez
Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Dean L. Schorno, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Rigel Pharmaceuticals, 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: May 2, 2023

/s/ DEAN L. SCHORNO
Dean L. Schorno
Chief Financial Officer

Exhibit 32.1

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

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Raul R. Rodriguez, Chief Executive Officer of Rigel Pharmaceuticals, Inc. (the "Company"), and Dean L. Schorno, Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

1. The Company's Quarterly Report on Form 10-Q for the period ended March 31, 2023, to which this Certification is attached as Exhibit 32.1 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act, and

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

In Witness Whereof, the undersigned have set their hands hereto as of May 2, 2023.

/s/ RAUL R. RODRIGUEZ	/s/ DEAN L. SCHORNO
Raul R. Rodriguez	Dean L. Schorno
Chief Executive Officer	Chief Financial Officer

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Rigel Pharmaceuticals, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.