UNITED STATES SECURITIES AND EXCHANGE COMMISSION

	WASHINGTON, D.C. 20549	
	FORM 10-Q	_
(Mark One)		_
■ QUARTERLY REPORT PURS EXCHANGE ACT OF 1934	SUANT TO SECTION 13 (OR 15(d) OF THE SECURITIES
For the	Quarterly Period Ended March	31, 2022
	OR	
☐ TRANSITION REPORT PURS EXCHANGE ACT OF 1934	SUANT TO SECTION 13 (OR 15(d) OF THE SECURITIES
	rvus Pharmaceuticals, it name of registrant as specified in its ch	
Delaware (State or other jurisdiction of incorporation)	001-37719 (Commission File Number)	46-4670809 (IRS Employer Identification Number)
• /	863 Mitten Road, Suite 102 Burlingame, CA 94010	,
(Address of p	principal executive offices, includi	ing Zip Code)
Registrant's telep	phone number, including area code	e: (650) 900-4520
Securities registered pursuant to Section 12(b) of the A	Act:	
Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common Stock, Par Value \$0.0001 per share	CRVS	Nasdaq Global Market
Indicate by check mark whether the registrant (1) has Act of 1934 during the preceding 12 months (or for su subject to such filing requirements for the past 90 day	ich shorter period that the registra	
Indicate by check mark whether the registrant has sub Rule 405 of Regulation S-T (§232.405 of this chapter) required to submit such files). Yes ⊠ No □) during the preceding 12 months	(or for such shorter period that the registrant was
Indicate by check mark whether the registrant is a large company, or any emerging growth company. See the cand "emerging growth company" in Rule 12b-2 of the	lefinitions of "large accelerated fil	filer, a non-accelerated filer, smaller reporting ler," "accelerated filer", "smaller reporting company"
Large accelerated filer \Box		Accelerated filer \square
Non-accelerated filer ⊠		Smaller reporting company $oxtimes$
Emerging growth company \Box]	
If an emerging growth company, indicate by check ma with any new or revised financial accounting standard		
Indicate by check mark whether the registrant is a she		
As of May 5, 2022, 46,553,511 shares of the registran	t's common stock, \$0.0001 par va	lue per share, were outstanding.

CORVUS PHARMACEUTICALS, INC.

QUARTERLY REPORT ON FORM 10-Q FOR THE QUARTER ENDED MARCH 31, 2022

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PART I - FINANCIAL INFORMATION

Item 1. Unaudited Condensed Financial Statements

CORVUS PHARMACEUTICALS, INC. CONDENSED CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share data) (unaudited)

	ľ	March 31, 2022	De	cember 31, 2021
Assets				
Current assets:				
Cash and cash equivalents	\$	31,460	\$	63,458
Marketable securities		31,484		5,993
Accounts receivable - related party		373		507
Prepaid and other current assets		1,050		1,354
Total current assets		64,367		71,312
Property and equipment, net		364		451
Operating lease right-of-use asset		2,952		3,190
Investment in Angel Pharmaceuticals		33,371		34,266
Other assets		236		236
Total assets	\$	101,290	\$	109,455
Liabilities and Stockholders' Equity				
Current liabilities:				
Accounts payable	\$	2,189	\$	1,565
Operating lease liability		1,090		1,046
Accrued and other liabilities		5,986		7,081
Total current liabilities		9,265		9,692
Operating lease liability		2,303		2,601
Total liabilities		11,568		12,293
Commitments and contingencies (Note 13)				
Stockholders' equity:				
Preferred stock: \$0.0001 par value; 10,000,000 shares authorized at March 31, 2022 and				
December 31, 2021; 0 shares issued and outstanding at March 31, 2022 and				
December 31, 2021		_		_
Common stock: \$0.0001 par value; 290,000,000 shares authorized at March 31, 2022 and				
December 31, 2021; 46,553,511 and 46,553,511 shares issued and outstanding at				
March 31, 2022 and December 31, 2021, respectively		5		5
Additional paid-in capital		362,408		361,669
Accumulated other comprehensive (loss) income		1,987		1,869
Accumulated deficit		(274,678)		(266,381)
Total stockholders' equity		89,722		97,162
Total liabilities and stockholders' equity	\$	101,290	\$	109,455

CORVUS PHARMACEUTICALS, INC. CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

(in thousands, except share and per share data) (unaudited)

	Th	ree Months Ended March 31,	
	2022	2 2021	_
Operating expenses:			
Research and development	\$ 5	5,100 \$ 8,230	
General and administrative		2,313 3,253	
Total operating expenses	7	7,413 11,483	
Loss from operations	(7	7,413) (11,483))
Interest income and other expense, net		11 3	
Sublease income - related party		146 —	
Loss from equity method investment	(1	1,041) (100))
Net loss	\$ (8	3,297) \$ (11,580))
Net loss per share, basic and diluted	\$	(0.18) \$ (0.34))
Shares used to compute net loss per share, basic and diluted	46,553	3,511 34,515,116	
Other comprehensive loss:			
Unrealized gain (loss) on marketable securities		(28) 2	
Cumulative foreign currency translation adjustment		146 —	_
Comprehensive loss	\$ (8	\$,179) \$ (11,578))

CORVUS PHARMACEUTICALS, INC. CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

(in thousands, except share data)
(unaudited)

	Three Months Ended March 31, 2022						
				Accumulated		<u> </u>	
			Additional	Other		Total	
	Commo	n Stock	Paid-in	Comprehensive	Accumulated	Stockholders'	
	Shares	Amount	Capital	Income	Deficit	Equity	
Balance at December 31, 2021	46,553,511	\$ 5	\$ 361,669	\$ 1,869	\$ (266,381)	\$ 97,162	
Stock-based compensation expense	_	_	739	_	_	739	
Unrealized loss on marketable securities	_	_	_	(28)	_	(28)	
Foreign currency translation adjustment	_	_	_	146	_	146	
Net loss	_	_	_	_	(8,297)	(8,297)	
Balance at March 31, 2022	46,553,511	\$ 5	\$ 362,408	\$ 1,987	\$ (274,678)	\$ 89,722	

	Three Months Ended March 31, 2021						
				Accumulated			
			Additional	Other		Total	
	Commo	n Stock	Paid-in	Comprehensive	Accumulated	Stockholders'	
	Shares	Amount	Capital	Income	Deficit	Equity	
Balance at December 31, 2020	28,372,634	\$ 3	\$ 295,281	\$ 4	\$ (223,140)	\$ 72,148	
Stock-based compensation expense	_	_	1,225	_	_	1,225	
Unrealized gain on marketable securities	_	_	_	2	_	2	
Issuance of common stock in connection with at-the-market							
offering, net	153,257	_	601	_	_	601	
Issuance of common stock upon follow-on public offering,							
net	9,783,660	1	31,988	_	_	31,989	
Net loss	_	_	_	_	(11,580)	(11,580)	
Balance at March 31, 2021	38,309,551	\$ 4	\$ 329,095	\$ 6	\$ (234,720)	\$ 94,385	

CORVUS PHARMACEUTICALS, INC. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands) (unaudited)

	Marc	
	2022	2021
Cash flows from operating activities		
Net loss	\$ (8,297)	\$ (11,580)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	87	137
Accretion related to marketable securities	55	95
Stock-based compensation	739	1,225
Loss from equity method investment	1,041	100
Changes in operating assets and liabilities:		
Accounts receivable - related party	134	_
Prepaid and other current assets	304	237
Operating lease right-of-use asset	238	193
Other assets	_	(664)
Accounts payable	624	1,443
Accrued and other liabilities	(1,095)	287
Operating lease liability	(254)	(260)
Net cash used in operating activities	(6,424)	(8,787)
Cash flows from investing activities		
Purchases of marketable securities	(26,384)	(3,321)
Sales of marketable securities	_	_
Maturities of marketable securities	810	8,167
Purchases of property and equipment		
Net cash provided by (used in) investing activities	(25,574)	4,846
Cash flows from financing activities		
Proceeds from issuance of common stock, net (includes \$4,850 in aggregate gross proceeds		
from related parties for the three months ended March 31, 2021)	_	31,989
Proceeds from issuance of common stock in connection with at-the-market offering, net	_	601
Net cash provided by financing activities		32,590
Net increase (decrease) in cash and cash equivalents	(31,998)	28,649
Cash and cash equivalents at beginning of the period	63,458	16,455
Cash and cash equivalents at end of the period	\$ 31,460	\$ 45,104

CORVUS PHARMACEUTICALS, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (unaudited)

1. Organization

Corvus Pharmaceuticals, Inc. ("Corvus" or the "Company") was incorporated in Delaware on January 27, 2014 and commenced operations in November 2014. Corvus is a clinical-stage biopharmaceutical company. The Company's operations are located in Burlingame, California.

Presentation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, Corvus Biopharmaceuticals, Ltd. and Corvus Hong Kong Limited. All significant intercompany accounts and transactions have been eliminated from the consolidated financial statements.

Initial Public Offering

On March 22, 2016, the Company's registration statement on Form S-1 (File No. 333-208850) relating to its initial public offering ("IPO") of its common stock was declared effective by the Securities and Exchange Commission ("SEC") and the shares of its common stock began trading on the Nasdaq Global Market on March 23, 2016. The public offering price of the shares sold in the IPO was \$15.00 per share. The IPO closed on March 29, 2016, pursuant to which the Company sold 4,700,000 shares of its common stock. On April 26, 2016, the Company sold an additional 502,618 shares of its common stock to the underwriters upon partial exercise of their over-allotment option, at the initial offering price of \$15.00 per share. The Company received aggregate net proceeds of approximately \$70.6 million, after underwriting discounts, commissions and offering expenses. Immediately prior to the consummation of the IPO, all outstanding shares of convertible preferred stock were converted into common stock.

Follow-on Public Offerings

In March 2018, the Company completed a follow-on public offering in which the Company sold 8,117,647 shares of common stock at a price of \$8.50 per share, which included 1,058,823 shares issued pursuant to the underwriters' exercise of their option to purchase additional shares of common stock. The aggregate net proceeds received by the Company from the offering were approximately \$64.9 million, net of underwriting discounts and commissions and offering expenses payable by the Company.

In February 2021, the Company completed a follow-on public offering in which the Company sold 9,783,660 shares of common stock at a price of \$3.50 per share, which included 1,212,231 shares issued pursuant to the underwriters' exercise of their option to purchase additional shares of common stock. The aggregate net proceeds received by the Company from the offering were approximately \$32.0 million, net of underwriting discounts and commissions and offering expenses.

Liquidity

The Company is subject to risks and uncertainties common to early-stage companies in the biotechnology industry, including, but not limited to, development by competitors of new technological innovations, protection of proprietary technology, dependence on key personnel, contract manufacturer and contract research organizations, compliance with government regulations and the need to obtain additional financing to fund operations. Since commencing operations in 2014, the majority of the Company's efforts have been focused on the research and development of mupadolimab (formerly CPI-006), CPI-818 and ciforadenant. The Company believes that it will continue to expend substantial resources for the foreseeable future as it continues clinical development of, seek regulatory approval for and, if approved, prepare for the commercialization of mupadolimab, CPI-818 and ciforadenant, as well as product candidates under the Company's other development programs. These expenditures will include costs associated with research and development, conducting preclinical studies and clinical trials, obtaining regulatory

approvals, manufacturing and supply, sales and marketing and general operations. In addition, other unanticipated costs may arise. Because the outcome of any clinical trial and/or regulatory approval process is highly uncertain, the Company may not be able to accurately estimate the actual amounts necessary to successfully complete the development, regulatory approval process and commercialization of mupadolimab, CPI-818, and ciforadenant or any other product candidates. The Company does not expect its existing capital resources to be sufficient to enable it to fund the completion of its clinical trials and remaining development program of mupadolimab, CPI-818 and ciforadenant through commercialization. In addition, its operating plan may change as a result of many factors, including those described in the Company's Annual Report on Form 10-K for the year ended December 31, 2021 filed on March 10, 2022 and this Quarterly Report on form 10-Q.

The Company has incurred significant losses and negative cash flows from operations in all periods since inception and had an accumulated deficit of \$274.7 million as of March 31, 2022. The Company has historically financed its operations primarily through the sale of redeemable convertible preferred stock and common stock. While the Company has been able to raise multiple rounds of financing, there can be no assurance that in the event the Company requires additional financing, such financing will be available on terms which are favorable or at all. Failure to generate sufficient cash flows from operations, raise additional capital or reduce certain discretionary spending would have a material adverse effect on the Company's ability to achieve its intended business objectives.

As of March 31, 2022, the Company had cash, cash equivalents and short-term marketable securities of \$62.9 million. Management believes that the Company's current cash, cash equivalents and short-term marketable securities will be sufficient to fund its planned operations for at least 12 months from the date of the issuance of these financial statements.

The current COVID-19 (coronavirus) pandemic, which is impacting worldwide economic activity, poses risks that the Company or its employees, contractors, suppliers, and other partners may be prevented from conducting business activities for an indefinite period of time, including due to shutdowns that may be requested or mandated by governmental authorities. The extent to which COVID-19 impacts the Company's business, including its clinical trials and financial condition, will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the spread of the disease, the duration of the pandemic, travel restrictions and social distancing in the United States and other countries, business closures or business disruptions and the effectiveness of actions taken in the United States and other countries to contain and treat the disease. As COVID-19 continues to spread around the globe, including the spread of more contagious and virulent variants, we will likely experience disruptions, including delays or difficulties in enrolling patients in our clinical trials, delays or difficulties in clinical site initiation, interruption of key clinical trial activities, delays in clinical sites receiving the supplies and materials needed to conduct our clinical trials and delays in necessary interactions with local regulatory authorities. COVID-19 may also impact the Company's ability to raise additional capital on a timely basis or at all, which could negatively impact short-term and long-term liquidity.

Exchange Warrants

On November 8, 2019, the Company entered into an exchange agreement (the "Exchange Agreement") with an investor and its affiliates (the "Exchanging Stockholders"), pursuant to which the Company exchanged an aggregate of 1,458,000 shares of the Company's common stock, par value \$0.0001 per share, owned by the Exchanging Stockholders for pre-funded warrants (the "Exchange Warrants") to purchase an aggregate of 1,458,000 shares of common stock (subject to adjustment in the event of any stock dividends and splits, reverse stock split, recapitalization, reorganization or similar transaction, as described in the Exchange Warrants), with an exercise price of \$0.0001 per share. The Exchange Warrants were exercisable at any time prior to expiration. In accordance with Accounting Standards Codification Topic 505, Equity, and Accounting Research Bulletin 43, the Company recorded the retirement of the common stock exchanged as a reduction of common shares outstanding and elected to record the excess over par value as a debit to additional paid-in-capital at the fair value of the Exchange Warrants on the issuance date. The Exchange Warrants were classified as equity in accordance with Accounting Standards Codification Topic 480, Distinguishing Liabilities from Equity, and Accounting Standards Codification Topic 815, Derivatives and Hedging, and the fair value of the Exchange Warrants was recorded as a credit to additional paid-in capital and is not subject to remeasurement. The Company determined that the fair value of the Exchange Warrants is substantially similar to the fair value of the retired shares on the issuance date due to the negligible exercise price for the Exchange Warrants.

In September 2021, the Exchange Warrants were fully exercised, resulting in the issuance of 1,457,947 shares of common stock on a net exercise basis.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying condensed consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP"). The Company's functional and reporting currency is the U.S. dollar, except for its investment in its equity method investee which is the Chinese renminbi (RMB). The accompanying condensed consolidated financial statements have been prepared on a going-concern basis, which contemplates the realization of assets and discharge of liabilities in the normal course of business. Since its inception, the Company has incurred significant losses and negative cash flows from operations. As of March 31, 2022, the Company had an accumulated deficit of \$274.7 million and cash, cash equivalents and marketable securities of \$62.9 million. The Company has financed its operations primarily with the proceeds from the sale of stock. The Company will need to raise additional capital to meet its business objectives. The Company believes that its current cash, cash equivalents and marketable securities will be sufficient to fund its planned expenditures and meet its obligations through at least the next twelve months from the issuance of these financial statements.

Unaudited Interim Financial Information

The accompanying interim condensed consolidated financial statements and related disclosures are unaudited, have been prepared on the same basis as the annual financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for a fair statement of the results of operations for the periods presented.

The year-end condensed consolidated balance sheet data was derived from audited financial statements, but does not include all disclosures required by GAAP. The condensed consolidated results of operations for the three months ended March 31, 2022 are not necessarily indicative of the results to be expected for the full year or for any other future year or interim period. The accompanying condensed consolidated financial statements should be read in conjunction with the audited financial statements and the related notes for the year ended December 31, 2021 included in the Company's Annual Report on Form 10-K filed with the SEC on March 10, 2022.

Use of Estimates

The preparation of the Company's condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. Actual results could differ from such estimates.

Foreign Currency Translation

Angel Pharmaceuticals Co., Ltd.'s ("Angel Pharmaceuticals") functional currency is the Chinese renminbi (RMB). Angel Pharmaceuticals' consolidated financial statements are reported in RMB. Financial information is translated from RMB to the U.S. dollar (the reporting currency) for inclusion in our consolidated financial statements. Income, expenses and cash flows are translated at average exchange rates prevailing during the fiscal period, assets and liabilities are translated at fiscal period-end exchange rates, and stockholders' equity is held at historical rates. Resulting translation adjustments are included as a component of accumulated other comprehensive income in stockholders' equity.

Out of Period Adjustment

In the three months ended June 30, 2021, the Company recorded a cumulative translation adjustment that affected the Company's balance sheet at June 30, 2021 by increasing its investment in Angel Pharmaceuticals and accumulated other comprehensive income in the equity section of the balance sheet by \$1.4 million. \$0.9 million of this amount was an out of period adjustment related to the year ended December 31, 2020. The impact of the out of period adjustment in the quarter ended March 31, 2021 was to reduce its investment in Angel Pharmaceuticals and other comprehensive income by \$83,000. The Company has concluded that the out of period adjustment is not material to the unaudited condensed consolidated financial statements for the quarter ended March 31, 2021.

Concentrations of Credit Risk and Other Risks and Uncertainties

Substantially all of the Company's cash and cash equivalents are deposited in accounts with two financial institutions that management believes are of high credit quality. Such deposits may, at times, exceed federally insured limits. The Company maintains its cash with an accredited financial institution and accordingly, such funds are subject to minimal credit risk. The Company's marketable securities consist of investments in U.S. Treasury securities and U.S. government agency securities, which can be subject to certain credit risks. However, the Company mitigates the risks by investing in high-grade instruments, limiting its exposure to any one issuer, and monitoring the ongoing creditworthiness of the financial institutions and issuers. The Company has not experienced any losses on its deposits of cash, cash equivalents or marketable securities.

The Company is subject to a number of risks similar to other early stage biopharmaceutical companies, including, but not limited to, the need to obtain adequate additional funding, possible failure of preclinical testing or clinical trials, its reliance on third parties to conduct its clinical trials, the need to obtain marketing approval for its product candidates, competitors developing new technological innovations, the need to successfully commercialize and gain market acceptance of the Company's product candidates, its right to develop and commercialize its product candidates pursuant to the terms and conditions of the licenses granted to the Company, and protection of proprietary technology. If the Company does not successfully commercialize or partner any of its product candidates, it will be unable to generate product revenue or achieve profitability.

Segments

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision-maker in making decisions regarding resource allocation and assessing performance. The Company views its operations and manages its business in one operating segment, that of the development of and commercialization of precisely targeted oncology therapies.

Significant Accounting Policies

The Company's significant accounting policies are described in Note 2 to its consolidated financial statements for the year ended December 31, 2021, included in its Annual Report on Form 10-K. There have been no material changes to the Company's significant accounting policies during the three months ended March 31, 2022.

Recent Accounting Pronouncements

In December 2019, the FASB issued ASU No. 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes. ASU 2019-12 simplifies the accounting for income taxes by eliminating certain exceptions to the guidance in ASC 740 related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. ASU 2019-12 is effective in 2021 and interim periods within that year and permits for an early adoption. The Company adopted ASU 2019-12 effective January 1, 2021. The adoption of the guidance did not have a material impact on its financial statements and related disclosures.

3. Net Loss per Share

The following table shows the calculation of net loss per share (in thousands, except share and per share data):

	Three Months Ended March 31,			
		2022	2021	
Numerator:				
Net loss - basic and diluted	\$	(8,297)	\$	(11,580)
Denominator:				
Weighted average common shares outstanding used to compute basic and diluted net				
loss per share	4	6,553,511	3	34,515,116
Net loss per share, basic and diluted	\$	(0.18)	\$	(0.34)

Weighted average common shares outstanding for the three months ended March 31, 2021 include 1,458,000 shares of common stock issuable on the conversion of pre-funded warrants described in Note 1.

The amounts in the table below were excluded from the calculation of diluted net loss per share, due to their anti-dilutive effect:

	Th	ree Moi Marc	nths Ended th 31,
	202	2	2021
Outstanding options	5,773	,988	6,223,385

4. Fair Value Measurements

Financial assets and liabilities are measured and recorded at fair value. The Company is required to disclose information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. The fair value hierarchy prioritizes valuation inputs based on the observable nature of those inputs. The fair value hierarchy applies only to the valuation inputs used in determining the reported fair value of the investments and is not a measure of the investment credit quality. The hierarchy defines three levels of valuation inputs:

- Level 1—Quoted prices in active markets for identical assets or liabilities
- Level 2—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly
- Level 3—Unobservable inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability

There have been no transfers of assets and liabilities between levels of hierarchy.

The Company's Level 2 investments are valued using third-party pricing sources. The pricing services utilize industry standard valuation models, including both income and market-based approaches, for which all significant inputs are observable, either directly or indirectly, to estimate fair value. These inputs include reported trades of and broker/dealer quotes on the same or similar investments, issuer credit spreads, benchmark investments, prepayment/default projections based on historical data and other observable inputs.

The following tables present information as of March 31, 2022 and December 31, 2021 about the Company's assets that are measured at fair value on a recurring basis and indicate the level of the fair value hierarchy the Company utilized to determine such fair values (in thousands):

	March 31, 2022							
		Fair Value Measured Using					Total	
	- ((Level 1)	(Level 2)	(I	Level 3)		Balance
Assets								
Cash equivalents	\$	29,948	\$	_	\$	_	\$	29,948
Marketable securities		25,465		6,019		_		31,484
	\$	55,413	\$	6,019	\$		\$	61,432
				Decembe	er 31,	2021		
		Fair	Valu	Measured	Using	<u> </u>		Total
	(Level 1) (Level 2) ((I	(Level 3) Balan		Balance	
Assets								
					_		ተ	61,992
Cash equivalents	\$	61,992	\$	_	\$	_	\$	01,332
Cash equivalents Marketable securities	\$	61,992 1,011	\$	4,982	\$		3	5,993

As of March 31, 2022, marketable securities had a maximum remaining maturity of twelve months.

As of March 31, 2022 and December 31, 2021, the fair value of available for sale marketable securities by type of security were as follows (in thousands):

	March 31, 2022				
	Amortized	Gross Unrealized	Gross Unrealized	Fair	
	Cost	Gains	Losses	Value	
U.S. Treasury securities	\$ 25,482	\$ —	\$ (18)	\$ 25,464	
U.S. Government agency securities	6,030	_	(10)	6,020	
	\$ 31,512	\$ —	\$ (28)	\$ 31,484	
		December 31, 2021			
		Gross	Gross		
	Amortized Cost	Unrealized Gains	Unrealized Losses	l Fair Value	
U.S. Treasury securities	\$ 1,012	\$ —	\$ (2)	\$ 1,010	
U.S. Government agency securities	4,984	_	(1)	4,983	
	\$ 5,996	\$ —	\$ (3)	\$ 5,993	

5. Equity Method Investment

As of March 31, 2022 and December 31, 2021, the Company's ownership interest in Angel was approximately 49.7%, excluding 7% of Angel's equity reserved for issuance under the Angel ESOP. The Company recognized its share of losses in Angel for the total amount of \$1.0 million as loss from equity method investment on the consolidated statement of operations for the three months ended March 31, 2022, respectively.

Summary Financial Information

Summary financial information for Angel Pharmaceuticals is as follows:

Balance Sheet Data (unaudited)	As of March 31, 2022		As of aber 31, 2021	
	 (In thousands)			
Current assets	\$ 36,524	\$	38,608	
Non-current assets	1,796		1,818	
Current liabilities	1,349		2,119	
Non-current liabilities	_		105	
Stockholders' equity	36,971		38,202	

	Three Months Ended March 31,						
Statement of Operations Data (unaudited)	 2022		2021				
	 (In tho	usands)					
Net loss	\$ (1,325)	\$	(118)				
Share of loss from investments accounted for using the equity method	(1,041)		(100)				

6. License and Collaboration Agreements

Scripps Licensing Agreement

In December 2014, the Company entered into a license agreement with The Scripps Research Institute ("Scripps"), pursuant to which it was granted a non-exclusive, world-wide license for all fields of use under Scripps' rights in certain know-how and technology related to a mouse hybridoma clone expressing an anti-human CD73 antibody, and to progeny, mutants or unmodified derivatives of such hybridoma and any antibodies expressed by such hybridoma, from which we developed mupadolimab. Scripps also granted the Company the right to grant sublicenses in conjunction with other proprietary rights the Company holds, or to others collaborating with or performing services for the Company. Under this license agreement, Scripps has agreed not to grant any additional commercial licenses with respect to such materials, other than march-in rights granted to the U.S. government.

Upon execution of the agreement, the Company made a one-time cash payment to Scripps of \$10,000 in 2015 and is also obligated to pay a minimum annual fee to Scripps of \$25,000. The one-time cash payment was recorded as research and development expense as technological feasibility of the asset had not been established and there was no alternative future use. A minimum annual fee payment is due on each anniversary of the effective date of the agreement for the term of the agreement. The Company is also required to make performance-based cash payments upon successful completion of clinical and sales milestones. The aggregate potential milestone payments are \$2.5 million. The Company is also required to pay royalties on net sales of licensed products (including mupadolimab) sold by it, its affiliates and its sublicensees at a rate in the low-single digits. In addition, should the Company sublicense the rights licensed under the agreement, it has agreed to pay a percentage of sublicense revenue received at specified rates that start at double digit percentages and decrease to single digit percentages based on the elapsed time from the effective date of the agreement and the time of entry into such sublicense.

The Company's license agreement with Scripps will terminate upon expiration of its obligation to pay royalties to Scripps under the license agreement. The Company's license agreement with Scripps is terminable by the consent of the parties, at will by the Company upon providing 90 days written notice to Scripps, or by Scripps for certain material breaches, or if the Company undergoes a bankruptcy event. In addition, Scripps may terminate the license on a product-by-product basis, or the entire agreement, if the Company fails to meet specified diligence obligations related to the development and commercialization of licensed products. Scripps may also terminate the agreement after the third anniversary of the effective date of the agreement if it reasonably believes, based on reports the Company provides to

Scripps, that the Company has not used commercially reasonable efforts as required under the agreement, subject to a specified notice and cure period.

Vernalis Licensing Agreement

In February 2015, the Company entered into a license agreement with Vernalis (R&D) Limited ("Vernalis"), which was subsequently amended as of November 5, 2015, and, pursuant to which the Company was granted an exclusive, worldwide license under certain patent rights and know-how, including a limited right to grant sublicenses, for all fields of use to develop, manufacture and commercialize products containing certain adenosine receptor antagonists, including ciforadenant (formerly CPI-444). Pursuant to this agreement, the Company made a one-time cash payment to Vernalis in the amount of \$1.0 million, which was recorded as research and development expense as technological feasibility of the asset had not been established and there was no alternative future use. The Company is also required to make cash milestone payments to Vernalis upon the successful completion of clinical and regulatory milestones for licensed products depending on the indications for which such licensed products are developed and upon achievement of certain sales milestones. In February 2017, the Company made a milestone payment of \$3.0 million to Vernalis following the expansion of a cohort of patients with renal cell cancer treated with single agent ciforadenant in the Company's Phase 1/1b clinical trial. The aggregate potential milestone payments are approximately \$220 million for all indications.

The Company has also agreed to pay Vernalis tiered incremental royalties based on the annual net sales of licensed products containing ciforadenant on a product-by-product and country-by-country basis, subject to certain offsets and reductions. The tiered royalty rates for products containing ciforadenant range from the mid-single digits up to the low-double digits on a country-by-country net sales basis. The royalties on other licensed products that do not include ciforadenant also increase with the amount of net sales on a product-by-product and country-by-country basis and range from the low-single digits up to the mid-single digits on a country-by-country net sales basis. The Company is also obligated to pay to Vernalis certain sales milestones as indicated above when worldwide net sales reach specified levels over an agreed upon time period.

The agreement will expire on a product-by-product and country-by-country basis upon the expiration of the Company's payment obligations to Vernalis in respect of a particular product and country. Both parties have the right to terminate the agreement for an uncured material breach by the other party. The Company may also terminate the agreement at its convenience by providing 90 days written notice, provided that the Company has not received notice of its own default under the agreement at the time the Company exercises such termination right. Vernalis may also terminate the agreement if the Company challenges a licensed patent or undergoes a bankruptcy event.

Genentech Collaboration Agreements

In October 2015, the Company entered into a clinical trial collaboration agreement with Genentech to evaluate the safety, tolerability and preliminary efficacy of ciforadenant combined with Genentech's investigational cancer immunotherapy, Tecentriq, a fully humanized monoclonal antibody targeting PD-L1, in a variety of solid tumors in our Phase 1/1b clinical trial. Pursuant to this agreement, the Company will be responsible for the conduct and cost of the relevant studies, under the supervision of a joint development committee made up of the Company's representatives and representatives of Genentech. Genentech will supply Tecentriq. At this time, no further patients are being enrolled in this trial. As part of the agreement, the Company granted Genentech certain rights of first negotiation to participate in future clinical trials that the Company may conduct evaluating the administration of ciforadenant in combination with an anti-PD-1 or anti-PD-L1 antibody. If both parties do not reach agreement on the terms of any such participation by Genentech within a specified time period, the Company retains the right to collaborate with third parties in such activities. The Company also granted Genentech certain rights of first negotiation should the Company decide to license development and commercialization rights to ciforadenant. Should both parties not reach agreement on the terms of such a license within a specified time of period, the Company retains the right to enter into a license with another third party. This agreement will expire after a set period of time following the provision by the Company of the final clinical study report to Genentech, which has not yet been finalized.

In May 2017, the Company entered into a second clinical trial collaboration agreement with Genentech. Under the new agreement, ciforadenant administered in combination with Tecentriq will be evaluated in a Phase 1b/2 randomized, controlled clinical study as second-line therapy in patients with NSCLC who are resistant and/or refractory to prior therapy with an anti-PD-(L)1 antibody. This study has completed patient enrollment of 16 patients. Genentech was responsible for the conduct of the study and the Company will share the cost of the Phase 1b/2 trial, which began enrolling patients in the fourth quarter of 2017. The Company is responsible for supplying ciforadenant and retains global development and commercialization rights to ciforadenant. This agreement will expire after a set period of time following the provision by Genentech of a final study report to the Company.

Monash License Agreement

In April 2017, the Company entered into a license agreement with Monash University (Monash), pursuant to which the Company was granted an exclusive, sublicensable worldwide license under certain know-how, patent rights and other intellectual property rights controlled by Monash to research, develop, and commercialize certain antibodies directed to CXCR2 for the treatment of human diseases.

Upon execution of the agreement, the Company made a one-time cash payment to Monash of \$275,000 and reimbursed Monash for certain patent prosecution costs incurred prior to execution of the agreement. The Company is also obligated to pay an annual license maintenance fee to Monash of \$25,000 until a certain development milestone is met with respect to the licensed product, after which no further maintenance fee will be due. The Company is also required to make development and sales milestone payments to Monash with respect to the licensed products in the aggregate of up to \$45.1 million. The Company is also required to pay to Monash tiered royalties on net sales of licensed products sold by it, its affiliates and its sublicensees at a rate ranging in the low-single digits. In addition, should the Company sublicense its rights under the agreement, the Company has agreed to pay a percentage of sublicense revenue received at specified rates that are currently at low double digit percentages and decrease to single digit percentages based on the achievement of development milestones.

The term of the Company's agreement with Monash continues until the expiration of its obligation to pay royalties to Monash thereunder. The license agreement is terminable at will by the Company upon providing 30 days written notice to Monash, or by either party for material breaches by the other party. In addition, Monash may terminate the entire agreement or convert the license to a non-exclusive license if the Company has materially breached its obligation to use commercially reasonable efforts to develop and commercialize a licensed product, subject to a specified notice and cure mechanism.

7. Balance Sheet Components (in thousands)

	M	arch 31, 2022	Dec	ember 31, 2021
Prepaid and Other Current Assets				
Interest receivable	\$	72	\$	32
Prepaid research and development manufacturing expenses		604		740
Prepaid facility expenses		182		174
Prepaid insurance		62		280
Other		130		128
	\$	1,050	\$	1,354
Property and Equipment				
Laboratory equipment	\$	2,477	\$	2,477
Computer equipment and purchased software		142		142
Leasehold improvements		2,084		2,084
		4,703		4,703
Less: accumulated depreciation and amortization		(4,339)		(4,252)
	\$	364	\$	451
Accrued and Other Liabilities		,		
Accrued clinical trial expense	\$	4,090	\$	4,010
Accrued manufacturing expense		643		839
Personnel related		947		1,846
Accrued legal and accounting		102		265
Other		204		121
	\$	5,986	\$	7,081

8. Common Stock

As of March 31, 2022, the amended and restated certificate of incorporation authorizes the Company to issue 290 million shares of common stock and 10 million shares of preferred stock.

Each share of common stock is entitled to one vote. Common stockholders are entitled to dividends if and when declared by the board of directors. As of March 31, 2022, no dividends on common stock had been declared.

In March 2020, the Company entered into an open market sale agreement (the "2020 Sales Agreement") with Jefferies LLC ("Jefferies") to sell shares of the Company's common stock, from time-to-time, with aggregate gross sales proceeds of up to \$50,000,000, through an at-the-market equity offering program under which Jefferies will act as its sales agent. In November 2021, the Company entered into another Sale Agreement ("2021 Sales Agreement") with Jefferies to sell shares of our common stock from time-to-time, with aggregate gross sales proceeds of up to \$40,000,000. The issuance and sale of shares of common stock by the Company pursuant to the Sales Agreements are deemed an "at-the-market" offering under the Securities Act of 1933, as amended. Jefferies is entitled to compensation for its services equal to up to 3.0% of the gross proceeds of any shares of common stock sold through Jefferies under the Sales Agreements.

During the quarter ended March 31, 2022, the Company did not sell any shares of common stock under it's at-the-market offering program. As of March 31, 2022, the Company had sold 6,920,339 shares of common stock for gross proceeds of \$31.1 million under the 2020 Sales Agreement and \$18.9 million and \$40.0 million remained for sale under the 2020 Sales Agreement and 2021 Sales Agreement, respectively.

The Company has reserved shares of common stock for issuance as follows:

	March 31, 2022	December 31, 2021
Shares available for future option grants	5,249,273	2,806,953
Outstanding options	5,773,988	6,354,308
Shares reserved for employee stock purchase plan	400,000	400,000
Total	11,423,261	9,561,261

9. Stock Option Plans

In February 2014, the Company adopted the 2014 Equity Incentive Plan (the "2014 Plan"), which was subsequently amended in November 2014, July 2015 and September 2015, under which it granted incentive stock options ("ISOs") or non-qualified stock options ("NSOs"). Terms of stock agreements, including vesting requirements, are determined by the board of directors or a committee authorized by the board of directors, subject to the provisions of the 2014 Plan. In general, awards granted by the Company vest over four years and have a maximum exercise term of 10 years. The 2014 Plan provides that grants must be at an exercise price of 100% of fair market value of the Company's common stock as determined by the board of directors on the date of the grant.

In connection with the consummation of the IPO in March 2016, the 2016 Equity Incentive Award Plan (the "2016 Plan"), became effective. Under the 2016 Plan, incentive stock options, non-statutory stock options, stock purchase rights and other stock-based awards may be granted. Terms of stock agreements, including vesting requirements, are determined by the board of directors or a committee authorized by the board of directors, subject to the provisions of the 2016 Plan. In general, awards granted by the Company vest over four years and have a maximum exercise term of 10 years. The 2016 Plan provides that grants must be at an exercise price of 100% of fair market value of the Company's common stock as determined by the board of directors on the date of the grant. In conjunction with adopting the 2016 Plan, the 2014 Plan was terminated and no further awards will be granted under the 2014 Plan. Options outstanding under the 2014 Plan as of the effective date of the 2016 Plan that are forfeited or lapse unexercised may be re-issued under the 2016 Plan, up to a maximum of 1,136,229 shares.

Activity under the Company's stock option plans is set forth below:

		Options Or	utstanding
	Shares Available for Grant	Number of Options	Weighted - Average Exercise Price
Balance at December 31, 2021	2,806,953	6,354,308	\$ 6.80
Additional shares authorized	1,862,000	_	_
Options granted	(72,400)	72,400	1.99
Options exercised	_	_	_
Options forfeited	652,720	(652,720)	8.83
Balance at March 31, 2022	5,249,273	5,773,988	\$ 6.51

10. Stock-Based Compensation

The Company's results of operations include expenses relating to employee and non-employee stock-based awards as follows (in thousands):

	7	Three Mor Marc	
	2	2022	2021
Research and development	\$	302	\$ 596
General and administrative		437	629
Total	\$	739	\$ 1,225

11. Income Taxes

During the three months ended March 31, 2022 and 2021, the Company recorded no income tax benefits for the net operating losses (NOLs) incurred due to the uncertainty of realizing a benefit from those items. The Company continues to maintain a full valuation allowance against its net deferred tax assets.

12. Facility Lease

In January 2015, the Company signed an initial operating lease, effective February 1, 2015 for 8,138 square feet of office and laboratory space with a one year term. Between January 2015 and September 2021, the Company entered into a series of lease amendments to increase the amount of leased space to 27,280 square feet and extend the expiration of the lease to February 2025. The lease agreement includes annual rent escalations. Under the lease and subsequent amendments, the landlord provided approximately \$1.9 million in free rent and lease incentives. The Company records rent expense on a straight-line basis over the effective term of the lease, including any free rent periods and incentives. As the interest rate implicit in lease arrangements is typically not readily available, in calculating the present value of the lease payments, the Company has utilized its incremental borrowing rate, which was determined based on the prevailing market rates for collateralized debt with maturity dates commensurate with the term of its lease. The Company's facility lease is a net lease, as the non-lease components (i.e. common area maintenance) are paid separately from rent based on actual costs incurred. Therefore, the non-lease components were not included in the right-of-use asset and liability and are reflected as an expense in the period incurred.

In September 2021, the Company entered into a lease amendment to extend the expiration of its operating lease by two years from February 2023 to February 2025. As a result of this lease extension, the Company recorded a \$2.4 million increase in the operating lease right-of-use asset and a corresponding increase in the operating lease liability.

As of March 31, 2022 and December 31, 2021, the right-of-use asset under operating lease was \$3.0 million and \$3.2 million, respectively. The elements of lease expense for the three months ended March 31, 2022 and 2021 were as follows (in thousands):

	Statements of operations and			ee Months Ended March 31,	
	comprehensive loss location		2022		2021
Costs of operating lease					
	Research and development,				
Operating lease costs	General and administrative	\$	306	\$	239
Costs of non-lease components (previously common	Research and development,				
area maintenance)	General and administrative		108		102
Total operating lease cost		\$	414	\$	341
Other Information			,		,
Operating cash flows used for operating lease		\$	433	\$	413
Remaining lease term		2.	8 years	1.	8 years
Discount rate			8.0%		10.0%

As of March 31, 2022, minimum rental commitments under this lease were as follows (in thousands):

Year Ended December 31 (in thousands)	
2022*	\$ 975
2023	1,391
2024	1,434
Total lease payments	3,800
Less: imputed interest	(407)
Total	\$ 3,393

^{*} Remainder of the year

As of December 31, 2021, minimum rental commitments under this lease were as follows (in thousands):

Year Ended December 31 (in thousands)	
2022	\$ 1,300
2023	1,391
2024	 1,434
Total lease payments	4,125
Less: imputed interest	(478)
Total	\$ 3,647

In August 2021, the Company entered into an agreement to sublease 7,585 square feet of its office and laboratory space in Burlingame, California to Angel Pharmaceuticals. Pursuant to the sublease, rent is due monthly and is subject to scheduled annual increases and Angel Pharmaceuticals is responsible for certain operating expenses and taxes throughout the life of the sublease. The sublease will expire in February 2023 and Angel Pharmaceuticals has no option to extend the sublease term. Sublease income is recognized on a straight-line basis as other income in our consolidated statements of operations. For the three months ended March 31, 2022 the Company recognized \$0.1 million of sublease income.

13. Commitments and Contingencies

Commitments

As of March 31, 2022, the Company had total non-cancellable purchase commitments of \$9.3\$ million for the purchase of drug substance in 2022.

Contingencies

In August 2015, the Company entered into an agreement for a line of credit of \$0.1 million for the purpose of issuing its landlord a letter of credit of \$0.1 million as a security deposit under its facility lease. The Company pledged money market funds and marketable securities as collateral for the line of credit. For further discussion of the Company's facility lease agreement, see Note 12.

Pursuant to the Company's license agreements with each of Vernalis, Scripps and Monash, it has obligations to make future milestone and royalty payments to these parties, respectively. However, because these amounts are contingent, they have not been included on the Company's balance sheet. For further discussion of the Vernalis, Scripps and Monash licensing agreements, see Note 6.

Indemnifications

In the ordinary course of business, the Company enters into agreements that may include indemnification provisions. Pursuant to such agreements, the Company may indemnify, hold harmless and defend an indemnified party for losses suffered or incurred by the indemnified party. Some of the provisions will limit losses to those arising from third-party actions. In some cases, the indemnification will continue after the termination of the agreement. The maximum potential amount of future payments the Company could be required to make under these provisions is not determinable. The Company has never incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. The Company has also entered into indemnification agreements with its directors and officers that may require the Company to indemnify its directors and officers against liabilities that may arise by reason of their status or service as directors or officers to the fullest extent permitted by Delaware corporate law. There have been no claims to date and the Company has a directors and officers insurance policy that may enable it to recover a portion of any amounts paid for future claims.

Legal Proceedings

The Company is not a party to any material legal proceedings.

14. Related Party Transactions

In February 2021, the Company completed a follow-on public offering in which the Company sold 9,783,660 shares of common stock at a price of \$3.50 per share, which included 1,212,231 shares issued pursuant to the underwriters' exercise of their option to purchase additional shares of common stock. The aggregate net proceeds received by the Company from the offering were approximately \$32.0 million, net of underwriting discounts and commissions and offering expenses.

The following aggregate number of shares of common stock were sold to the Company's owners of more than 5% of our common stock, directors, or executive officers during the February 2021 underwritten public offering:

Owners of More Than 5% of Our Common Stock	Number of Shares of Common Stock	 Aggregate Purchase Price
OrbiMed Advisors LLC (1)	1,285,714	\$ 4,499,999
Board of Directors		
Richard A. Miller, M.D.	100,000	350,000

(1) Peter Thompson, M.D., a member of our Board of Directors since November 2014, is a Private Equity Partner at OrbiMed Advisors, LLC.

As more fully described in Note 5 to the Company's consolidated financial statements for the year ended December 31, 2021, included in the Annual Report on Form 10-K, the Company holds a 49.7% ownership in Angel Pharmaceuticals and, in connection with intellectual property licensing agreements between the Company and Angel Pharmaceuticals, the Company provides operational support and clinical drug supplies to Angel Pharmaceuticals. Third-party and internal personnel costs incurred by the Company are billed to Angel Pharmaceuticals in the period incurred and recorded as an offset to expenses. During the three months ended March 31, 2022, the Company billed Angel for approximately \$50,000 in internal personnel costs and \$101,000 in third-party party costs.

In August 2021, the Company entered into an agreement to sublease 7,585 square feet of its office and laboratory space in Burlingame, California to Angel Pharmaceuticals. Pursuant to the sublease, rent is due monthly and is subject to scheduled annual increases and Angel Pharmaceuticals is responsible for certain operating expenses and taxes throughout the life of the sublease. The sublease will expire in February 2023 and Angel Pharmaceuticals has no option to extend the sublease term. Sublease income is recognized on a straight-line basis as other income in our consolidated statements of operations. For the three months ended March 31, 2022, the Company recognized approximately \$146,000 of sublease income.

In July 2021, Linda S. Grais, M.D., J.D., a member of the Company's Board of Directors, was appointed as a non-executive member of the Board of Directors of ICON plc ("ICON"), effective upon completion of ICON's acquisition of PRA Health Sciences, Inc. ICON is a clinical research organization and provides services to support the Company's clinical trials. During the three months ended March 31, 2022 and 2021, the Company recorded approximately \$69,000 and \$60,000, respectively, in clinical trial expenses under its agreements with ICON.

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

You should read the following discussion and analysis of our financial condition and results of operations together with our unaudited condensed consolidated financial statements and related notes thereto included in Part I, Item 1 of this Quarterly Report on Form 10-Q and with our audited consolidated financial statements and notes for the year ended December 31, 2021, included in our Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission ("SEC") on March 10, 2022.

This discussion and other parts of this report contain forward-looking statements that involve risks and uncertainties, such as statements of our plans, objectives, expectations and intentions. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the section of this report entitled "Risk Factors." Except as may be required by law, we assume no obligation to update these forward-looking statements or the reasons that results could differ from these forward-looking statements.

Overview

We are a clinical stage biopharmaceutical company. Our strategy is to focus our efforts on the development of immune modulator product candidates with the potential to treat solid cancers, T-cell lymphomas, autoimmune diseases and infectious diseases. We have built a pipeline of five programs, three of which are in clinical development.

Our lead product candidate is mupadolimab (formerly CPI-006), a humanized monoclonal antibody that is designed to react with a specific site on CD73. In both preclinical and in vivo studies in cancer patients and patients with COVID-19, mupadolimab has demonstrated binding to various immune cells and the enhancement of immune responses by activating B cells. We believe mupadolimab has the potential to be an important new therapeutic agent with a novel mechanism of action for the treatment of a broad range of cancers and infectious diseases.

Mupadolimab is a unique antibody that is designed to bind to a critical epitope involved in B cell signaling. Our work in both cancer and viral diseases, such as COVID-19, have provided important insights and data into how we may best evaluate the biologic properties of our antibody candidate in the clinic. Our studies have uncovered a novel potential mechanism of action: mupadolimab has the ability to activate B cells which may then be driven into antibody producing plasma cells by the presence of tumor associated antigens within the tumor. Recent work by several groups have highlighted the importance of B cells in anti-tumor immunity. As published in Nature in 2020, investigators have shown that B cell infiltration in some tumors are strong predictors of response to immunotherapies and predictors of favorable outcomes.

In February 2018, we initiated a Phase 1/1b clinical trial with mupadolimab administered alone and in combination with ciforadenant or pembrolizumab, and in combination with ciforadenant and pembrolizumab. As of March 1, 2022, we have enrolled over 110 patients in this clinical trial at doses of up to 24 mg/kg every three weeks. Key findings from this trial as of March 1, 2022 include the observation that mupadolimab was well-tolerated and evidence of B-cell activation and lymphocyte trafficking was observed in patients that received single doses as low as 1 mg/kg. Treatment with mupadolimab was also associated with increases in memory B-cells in the blood, the emergence of new B-cell clones and, in some patients, the production of novel anti-tumor antibodies.

At the 2021 Annual Meeting of the Society for Immunotherapy of Cancer ("SITC") in November 2021, we presented interim data demonstrating anti-tumor activity in NSCLC and head and neck cancer ("HNSCC") patients treated with 12 mg./kg or greater of mupadolimab as a single agent, in combination with ciforadenant, in combination with pembrolizumab or in combination with pembrolizumab and ciforadenant. These patients had advanced refractory disease and failed a median of three prior therapies. Further, all but one had failed therapy with prior anti PD(L)-1 antibodies. There were 16 evaluable NSCLC and HNSCC patients. Seven patients achieved tumor regression, which did not meet the criteria for partial response by RECIST. However, for the patients that showed tumor regression, six patients had progressive disease as their best response to their last treatment prior to entering the Phase 1/1b clinical trial, which indicates that the tumors in these patients were not responsive to their last therapy. The seven patients who showed tumor regression on the trial were treated for a period of 4.5 to 12.5 months.

Based on the interim results presented at SITC, we plan to initiate a placebo controlled, randomized Phase 2 clinical trial of mupadolimab as a front-line therapy for the treatment of patients with advanced NSCLC. The randomized, blinded trial will compare standard chemotherapy plus pembrolizumab (anti-PDL-1) with or without mupadolimab. The trial is planned to enroll approximately 150 patients with any tumor PDL-1 expression. The primary endpoint for the study will be progression free survival and secondary endpoints will include objective response rate and overall survival.

Our next product candidate, CPI-818, is an investigational selective, orally bioavailable, covalent inhibitor of ITK designed to have low nanomolar affinity. ITK, an enzyme that functions in T cell signaling and differentiation, is expressed predominantly in T cells, which are lymphocytes that play a vital role in immune responses. T cell lymphomas are malignancies of T cells that proliferate and spread throughout the body. These lymphomas often have tonic signaling through the T cell receptor pathway, which involves ITK. Inhibition of ITK could result in blockade of this signaling pathway and potential control of the malignancy. One of the key survival mechanisms of solid tumors is believed to be the reprogramming of normal T cells to create an inflammatory environment that inhibits anti-tumor immune response and favors tumor growth. We believe highly selective inhibitors of this enzyme will facilitate induction of T cell anti-tumor immunity and may be useful in the treatment of solid tumors.

CPI-818 is currently being studied in a Phase 1/1b clinical trial that was designed to select the recommended dose of CPI-818 and evaluate its safety, pharmacokinetics, target occupancy, biomarkers and efficacy. The study employs an adaptive, expansion cohort design, with an initial phase that evaluated escalating doses (100, 200, 400, 600 mg taken twice a day) in successive cohorts of patients, followed by a second phase that is designed to evaluate safety and tumor response to the recommended dose of CPI-818 in disease-specific patient cohorts. By protocol design, treatment is discontinued after one year or upon disease progression. The study enrolled 25 patients from the United States, Australia and South Korea with several types of advanced, refractory T cell lymphomas, including nine patients with peripheral T-cell lymphoma ("PTCL"), 12 patients with cutaneous T-cell lymphoma ("CTCL"), and four patients with other T-cell lymphomas. All patients had failed multiple prior therapies.

In December 2020 at the American Society of Hematology Annual Meeting, we presented preliminary Phase 1/1b clinical data with CPI-818 in refractory T cell lymphomas in patients receiving adequate doses of the drug. The data presented were as follows:

- Of the seven evaluable patients with PTCL, there were two objective tumor responses as of the cut-off date of October 5, 2020:
 - One patient, who previously failed chemotherapy and high dose chemotherapy with autologous bone marrow transplantation, achieved a complete response ("CR") with CPI-818 at month 8 that remained ongoing after 12 months on study. The patient received CPI-818 for 12 months and the CR persisted beyond discontinuation of therapy (per the study protocol, the patient stopped receiving therapy after 12 months on study).
 - One patient who failed multiple prior therapies achieved a partial response at four months on therapy. This patient then went on to receive a bone marrow transplant.
- Of the 11 evaluable patients with CTCL:
 - One patient achieved a complete response in lymph node disease and continued to have stable cutaneous disease at more than 12 months on therapy as of November 2, 2020.
 - O Three patients achieved stable disease on therapy for between 3 and 5 months.
- There was a dose dependent increase in receptor occupancy, with trough occupancy >75% observed at the 200, 400 and 600 mg doses.

• No dose limiting toxicities and no grade 3 or 4 treatment related adverse events have been observed to date.

Based on the interim results from our Phase 1/1b clinical trial, Angel Pharmaceuticals joined this clinical trial. T cell lymphomas are more common in China than the United States representing approximately 26% of non-Hodgkins lymphomas in China. In January 2022, Angel Pharmaceuticals announced the enrollment of the first patient in the clinical trial.

Our third product candidate, ciforadenant (formerly CPI-444), is an oral, small molecule antagonist of the A2A receptor for adenosine with which we completed a Phase 2 expansion protocol in combination with Genentech, Inc.'s cancer immunotherapy, Tecentriq® (atezolizumab) for patients with either advanced or refractory renal cell cancer ("RCC"). Ciforadenant is designed to disable a tumor's ability to subvert attack by the immune system by blocking the binding of adenosine in the tumor microenvironment to the A2A receptor.

We also discovered the Adenosine Gene Signature, which we believe has demonstrated the potential to serve as a biomarker to identify patients most likely to respond to treatment with ciforadenant. The results of our Phase 1/1b clinical trial involving 68 patients with RCC were published in the journal Cancer Discovery in January 2020. This study reported that in 30 patients evaluated for the Adenosine Gene Signature, no patients showing a low Adenosine Gene Signature exhibited signs of tumor regression while 17% (3 of 18) of patients with a high Adenosine Gene Signature had an overall response rate by RECIST criteria. We have refined our strategy with ciforadenant and plan to collaborate with the Kidney Cancer Consortium to evaluate ciforadenant in a Phase 2 clinical trial in first-line therapy for advanced RCC in combination with ipilimumab and nivolumab. The trial is expected to enroll approximately 60 patients. The endpoint of the clinical trial is expected to be deep response rate defined as greater than 50% reduction of tumor volume. Deep response rates in renal cell cancer have been found to correlate with long term progression free survival. The Adenosine Gene Signature biomarker also will be evaluated in tumor biopsy specimens. Preclinical studies and data from earlier clinical trials with ciforadenant, suggest adenosine may be a cause of resistance to current therapies with anti PD(L)-1.

To date, the majority of our efforts have been focused on the research, development and advancement of mupadolimab, CPI-818 and ciforadenant, and we have not generated any revenue from product sales and, as a result, we have incurred significant losses. We expect to continue to incur significant research and development and general and administrative expenses related to our operations. Our net loss for the three months ended March 31, 2022 and 2021 was \$8.3 million and \$11.6 million, respectively. As of March 31, 2022, we had an accumulated deficit of \$274.7 million. We expect to continue to incur losses for the foreseeable future, and we anticipate these losses will increase as we continue our development of, seek regulatory approval for and begin to commercialize mupadolimab, CPI-818 and ciforadenant, and as we develop other product candidates. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods.

Since our inception and through March 31, 2022, we have funded our operations primarily through the sale and issuance of stock, including through our initial public offering ("IPO") in March 2016, in which we raised net proceeds of approximately \$70.6 million, a follow-on offering of our common stock in March 2018, in which we raised net proceeds of approximately \$64.9 million and a follow on offering in February 2021, in which we raised net proceeds of approximately \$32.0 million, in each case net of underwriting discounts and commissions and offering expenses. Immediately prior to the consummation of the IPO, all of our outstanding shares of convertible preferred stock were converted into 14.3 million shares of our common stock.

In March 2020, we entered into an open market sale agreement (the "2020 Sales Agreement") with Jefferies LLC ("Jefferies") to sell shares of the Company's common stock, from time-to-time, with aggregate gross sales proceeds of up to \$50,000,000, through an at-the-market equity offering program under which Jefferies will act as our sales agent. In November 2021, we entered into another Sale Agreement ("2021 Sales Agreement") with Jefferies to sell shares of our common stock from time-to-time, with aggregate gross sales proceeds of up to \$40,000,000. Jefferies is entitled to compensation for its services equal to up to 3.0% of the gross proceeds of any shares of common stock sold through Jefferies under the 2020 Sales Agreement and 2021 Sales Agreement.

During the quarter ended March 31, 2022, we did not sell any shares under our at-the-market offering program. As of March 31, 2022, we had sold 6,920,339 shares of common stock for gross proceeds of \$31.1 million under the 2020 Sales Agreement, and \$18.9 million and \$40.0 million remained for sale under the 2020 Sales Agreement and 2021 Sales Agreement, respectively.

As of March 31, 2022, we had capital resources consisting of cash, cash equivalents and marketable securities of approximately \$62.9 million. While we believe that our current cash, cash equivalents and short-term marketable securities will be sufficient to fund our planned operations for at least 12 months from the date of the issuance of these financial statements, we do not expect our existing capital resources to be sufficient to enable us to fund the completion of all of our ongoing or planned clinical trials and remaining development program of any of mupadolimab, CPI-818 or ciforadenant through commercialization. In addition, our operating plan may change as a result of many factors, including those described in the section of this report entitled "Risk Factors" and others currently unknown to us, and we may need to seek additional funds sooner than planned, through public or private equity, debt financings or other sources, such as strategic collaborations. Such financing would result in dilution to stockholders, imposition of debt covenants and repayment obligations or other restrictions that may affect our business. If we raise additional capital through strategic collaboration agreements, we may have to relinquish valuable rights to our product candidates, including possible future revenue streams. In addition, additional funding may not be available to us on acceptable terms or at all and any additional fundraising efforts may divert our management from its day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. Furthermore, even if we believe we have sufficient funds for our current or future operating plans, we may seek additional capital due to favorable market conditions or strategic considerations.

We currently have no manufacturing capabilities and do not intend to establish any such capabilities. We have no commercial manufacturing facilities for our product candidates. As such, we are dependent on third parties to supply our product candidates according to our specifications, in sufficient quantities, on time, in compliance with appropriate regulatory standards and at competitive prices.

Impact of COVID-19

COVID-19 has placed strains on the providers of healthcare services, including the healthcare institutions where we conduct our clinical trials. These strains have resulted in institutions prohibiting the initiation of new clinical trials, enrollment in existing clinical trials and restricting the on-site monitoring of clinical trials. We also follow FDA guidance on clinical trial conduct during the COVID-19 pandemic, including the remote monitoring of clinical data.

In alignment with public health guidance designed to slow the spread of COVID-19, as of mid-March 2020, we implemented a reduced onsite staffing model and transitioned to a remote work plan for all employees other than those providing essential services, such as our laboratory staff. In July 2021, we started transitioning back to office work for employees not providing essential services. For our onsite employees, we have implemented heightened health and safety measures designed to comply with applicable federal, state and local guidelines in response to the COVID-19 pandemic. We are further supporting all of our employees by leveraging virtual meeting technology and encouraging employees to follow local health authority guidance. We may need to undertake additional actions that could impact our operations if required by applicable laws or regulations or if we determine such actions to be in the best interests of our employees.

Significant Accounting Policies

Our significant accounting policies are described in Note 2 to our consolidated financial statements for the year ended December 31, 2021 included in our Annual Report on Form 10-K. There have been no material changes to our significant accounting policies during the three months ended March 31, 2022.

Components of Results of Operations

Revenue

To date, we have not generated any revenues. We do not expect to receive any revenues from any product candidates that we develop unless and until we obtain regulatory approval and commercialize our products or enter into revenue-generating collaboration agreements with third parties.

Research and Development Expenses

Our research and development expenses consist primarily of costs incurred to conduct research and development of our product candidates. We record research and development expenses as incurred. Research and development expenses include:

- employee-related expenses, including salaries, benefits, travel and non-cash stock-based compensation expense;
- external research and development expenses incurred under arrangements with third parties, such as contract research organizations, preclinical testing organizations, contract manufacturing organizations, academic and non-profit institutions and consultants;
- costs to acquire technologies to be used in research and development that have not reached technological feasibility and have no alternative future use;
- license fees; and
- other expenses, which include direct and allocated expenses for laboratory, facilities and other costs.

We plan to increase our research and development expenses substantially as we continue the development and potential commercialization of our product candidates. Our current planned research and development activities include the following:

- enrollment and completion of our Phase 1/1b clinical trial of mupadolimab in patients with NSCLC and advanced, HPV+ head and neck cancer;
- enrollment and completion of our ongoing Phase 1/1b clinical trial of CPI-818;
- enrollment and completion of our Phase 2 clinical trials of mupadolimab;
- process development and manufacturing of drug supply of mupadolimab, CPI-818 and ciforadenant; and
- preclinical studies under our other programs in order to select development product candidates.

In addition to our product candidates that are in clinical development, we believe it is important to continue substantial investment in potential new product candidates to build the value of our product candidate pipeline and our business.

Our expenditures on current and future preclinical and clinical development programs are subject to numerous uncertainties related to timing and cost to completion. The duration, costs and timing of clinical trials and development of product candidates will depend on a variety of factors, including many of which are beyond our control. The process of conducting the necessary clinical research to obtain regulatory approval is costly and time consuming, and the successful development of our product candidates is uncertain. The risks and uncertainties associated with our research and development projects are discussed more fully in "Part II, Item 1A—Risk Factors." As a result of these risks and

uncertainties, we are unable to determine with any degree of certainty the duration and completion costs of our research and development projects or if, when or to what extent we will generate revenues from the commercialization and sale of any of our product candidates that obtain regulatory approval. We may never succeed in achieving regulatory approval for any of our product candidates.

General and Administrative Expenses

General and administrative expenses include personnel costs, expenses for outside professional services and allocated expenses. Personnel costs consist of salaries, benefits and stock-based compensation. Outside professional services consist of legal, accounting and audit services and other consulting fees. Allocated expenses consist of rent expense related to our office and research and development facility.

We expect that our general and administrative expenses will increase in the future as we increase our headcount to support our continued research and development and potential commercialization of one or more of our product candidates.

Results of Operations

Comparison of the periods below as indicated (in thousands):

		nths Ended ch 31,	
	2022	2021	Change
Operating expenses:			
Research and development	\$ 5,100	\$ 8,230	\$ (3,130)
General and administrative	2,313	3,253	(940)
Total operating expenses	7,413	11,483	(4,070)
Loss from operations	(7,413)	(11,483)	4,070
Interest income and other expense, net	11	3	8
Sublease income - related party	146	_	146
Loss from equity method investment	(1,041)	(100)	(941)
Net loss	\$ (8,297)	\$ (11,580)	\$ 3,283

Research and Development Expenses

Research and development expenses for the three months ended March 31, 2022 and 2021 consisted of the following costs by program and unallocated employee costs and overhead costs (specific program costs consist solely of external costs) (in thousands):

	Three Mo Mare	 		
	2022	2021	(Change
Ciforadenant (formerly CPI-444)	\$ 529	\$ 404	\$	125
Mupadolimab (formerly CPI-006)	1,749	3,997		(2,248)
CPI-818	384	294		90
Unallocated employee and overhead costs	2,438	3,535		(1,097)
	\$ 5,100	\$ 8,230	\$	(3,130)

For the three months ended March 31, 2022, the increase in ciforadenant costs of \$0.1 million as compared to the three months ended March 31, 2021, primarily consisted of an increase of \$0.1 million in drug manufacturing costs and an increase of \$0.1 million in other outside service costs, which were partially offset by a decrease of \$0.1 million in clinical trial expenses.

For the three months ended March 31, 2022, the decrease in mupadolimab costs of \$2.2 million as compared to the three months ended March 31, 2021, primarily consisted of a decrease of \$2.0 million in clinical trial expenses and a decrease of \$0.4 million in licensing expense, which were partially offset by an increase of \$0.2 million in drug manufacturing costs.

For the three months ended March 31, 2022, the increase in CPI-818 costs of \$0.1 million as compared to the three months ended March 31, 2021, primarily consisted of an increase in drug manufacturing costs.

For the three months ended March 31, 2022, the decrease in unallocated costs of \$1.1 million as compared to the three months ended March 31, 2021, primarily consisted of a decrease of \$1.0 million in personnel and related costs and a decrease of \$0.1 million in other outside service costs.

General and Administrative Expense

For the three months ended March 31, 2022, the decrease in general and administrative expenses of \$0.9 million as compared to the three months ended March 31, 2021, primarily consisted of a decrease of \$0.6 million in personnel and related costs and a decrease of \$0.3 million in professional service costs.

Interest Income and Other Expense, net

For the three months ended March 31, 2022 and 2021, interest income and other expense, net was negligible.

Sublease Income – Related Party

For the three months ended March 31, 2022, sublease income of \$0.1 million represents rental income associated with our building sublease to Angel Pharmaceuticals.

Loss from equity method investment

For the three months ended March 31, 2022, the increase in loss from equity method investment of \$0.9 million as compared to the three months ended March 31, 2021, primarily consisted of an increase in our share of Angel Pharmaceutical's loss for the three months ended March 31, 2022.

Liquidity and Capital Resources

As of March 31, 2022, we had cash, cash equivalents and marketable securities of \$62.9 million, and an accumulated deficit of \$274.7 million, compared to cash and cash equivalents and marketable securities of \$69.5 million and an accumulated deficit of \$266.4 million as of December 31, 2021. We have financed our operations primarily through private placements of convertible preferred stock and the sale of common stock.

Since our inception and through March 31, 2022, we have funded our operations primarily through the sale and issuance of stock, including through our IPO in March 2016, in which we raised net proceeds of approximately \$70.6 million, a follow-on offering of our common stock in March 2018, in which we raised net proceeds of approximately \$64.9 million and a follow on offering in February 2021, in which we raised net proceeds of approximately \$32.0 million, in each case net of underwriting discounts and commissions and offering expenses. Immediately prior to the consummation of the IPO, all of our outstanding shares of convertible preferred stock were converted into 14.3 million shares of our common stock.

In March 2020, we entered into the 2020 Sales Agreement with Jefferies to sell shares of the Company's common stock, from time-to-time, with aggregate gross sales proceeds of up to \$50,000,000, through an at-the-market equity offering program under which Jefferies will act as our sales agent. In November 2021, we entered into the 2021 Sales Agreement with Jefferies to sell shares of our common stock from time-to-time, with aggregate gross sales proceeds of up to \$40,000,000. Jefferies is entitled to compensation for its services equal to up to 3.0% of the gross

proceeds of any shares of common stock sold through Jefferies under the 2020 Sales Agreement and 2021 Sales Agreement.

During the three months ended March 31, 2022, we did not sell any shares under our at-the-market offering program. As of March 31, 2022, we had sold 6,920,339 shares of common stock for gross proceeds of \$31.1 million under the 2020 Sales Agreement and \$18.9 million and \$40.0 million remained for sale under the 2020 Sales Agreement and 2021 Sales Agreement, respectively.

We believe our current cash, cash equivalents and marketable securities will be sufficient to fund our planned expenditures and meet our obligations through at least the next twelve months from the issuance of our financial statements as of and for the three months ended March 31, 2022. The amounts and timing of our actual expenditures depend on numerous factors, including:

- the progress, timing, costs and results of clinical trials for mupadolimab, CPI-818 and ciforadenant;
- the timing, progress, costs and results of preclinical and clinical development activities for our other product candidates;
- the number and scope of preclinical and clinical programs we decide to pursue;
- the costs involved in prosecuting, maintaining and enforcing patent and other intellectual property rights;
- the cost and timing of regulatory approvals;
- our efforts to enhance operational systems and hire additional personnel, including personnel to support development of our product candidates and satisfy our obligations as a public company;
- the extent to which the COVID-19 pandemic may impact our business, including our clinical trials and financial condition; and
- other factors described in the section of this report entitled "Risk Factors."

We expect to increase our spending in connection with the development and commercialization of our product candidates. Until such time, if ever, as we can generate substantial revenue from product sales, we expect to fund our operations and capital funding needs through equity and/or debt financings. We may also enter into additional collaboration arrangements or selectively partner for clinical development and commercialization. The sale of additional equity would result in dilution to our stockholders. The incurrence of debt financing would result in debt service obligations and the governing documents would likely include operating and financing covenants that would restrict our operations. In addition, sufficient additional funding may not be available on acceptable terms, or at all. If we are not able to secure adequate additional funding, we may be forced to make reductions in spending, extend payment terms with suppliers, liquidate assets where possible and/or suspend or curtail planned programs. Any of these actions could have a material effect on our business, financial condition and results of operations.

Summary of Statement of Cash Flows

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

	Three Mor		
	2022 2021		
Net cash provided by (used in):			
Operating activities	\$ (6,424)	\$	(8,787)
Investing activities	(25,574)		4,846
Financing activities	_		32,590
Net increase in cash and cash equivalents	\$ (31,998)	\$	28,649

Cash Flows from Operating Activities

Cash used in operating activities during the three months ended March 31, 2022 was \$6.4 million, which primarily consisted of a net loss of \$8.3 million, adjusted by non-cash charges of \$1.9 million, that primarily consisted of \$0.7 million of stock compensation expense and \$1.0 million of loss from equity method investment, a decrease of \$0.3 million in prepaid and other current assets, a decrease of \$0.1 million in accounts receivable, a decrease of \$0.5 million in accounts payable and accrued and other current liabilities.

Cash used in operating activities during the three months ended March 31, 2021 was \$8.8 million, which primarily consisted of a net loss of \$11.6 million, adjusted by non-cash charges of \$1.6 million, that primarily consisted of \$1.2 million of stock compensation expense, an increase of \$1.7 million in accounts payable and accrued and other current liabilities, a decrease in prepaid and other current assets of \$0.2 million, and an increase in other assets of \$0.7 million.

Cash Flows from Investing Activities

During the three months ended March 31, 2022, cash used in investing activities was \$25.6 million, that consisted of purchases of marketable securities of \$26.4 million, which were partially offset by proceeds from maturities of marketable securities of \$0.8 million.

During the three months ended March 31, 2021, cash provided in investing activities was \$4.8 million, that consisted of proceeds from maturities of marketable securities of \$8.2 million, which were partially offset by purchases of marketable securities of \$3.3 million.

Cash Flows from Financing Activities

During the three months ended March 31, 2022, there were no cash flows from financing activities.

During the three months ended March 31, 2021, cash provided by financing activities was \$32.6 million, which consisted of \$32.0 million in net proceeds from our February 2021 follow-on public offering and \$0.6 million in net proceeds from the issuance of common stock through our at-the-market offering program.

Contractual Obligations

There have been no material changes outside the ordinary course of our business to our contractual obligations during the three months ended March 31, 2022, as compared to those disclosed in our Annual Report on Form 10-K.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risk related to changes in interest rates. We had cash and cash equivalents and marketable securities of \$62.9 million as of March 31, 2022 and cash, cash equivalents and marketable securities of \$69.5 million as of December 31, 2021, which consisted of bank deposits, money market investments, U.S. Treasury securities and U.S. government agency securities. Such interest-earning instruments carry a degree of interest rate risk; however, historical fluctuations of interest income have not been significant. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 10% increase in interest rates would not have a material effect on the fair market value of our portfolio.

Item 4. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act") refers to controls and procedures that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to provide reasonable assurance that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Due to the inherent limitations of control systems, including the possibility of human error and the circumvention or overriding of the controls and procedures, not all misstatements may be prevented or detected. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their control objectives.

As required by Rule 13a-15(b) under the Exchange Act, our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2022 the end of the period covered by this Quarterly Report on Form 10-Q. Based upon such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of such date.

(b) Changes in Internal Controls Over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the period covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1 — Legal Proceedings

We are not currently a party to any material litigation or legal proceedings.

Item 1A — Risk Factors

Our business involves significant risks, some of which are described below. You should consider carefully the risks and uncertainties described below, together with all of the other information in this Quarterly Report on Form 10-Q, including our unaudited condensed consolidated financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q and "Management's Discussion and Analysis of Financial Condition and Results of Operations." If any of the following risks are realized, our business, financial condition, results of operations and

prospects could be materially and adversely affected. Many of the following risks and uncertainties are, and will be, exacerbated by the COVID-19 pandemic and any worsening of the global business and economic environment as a result. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations.

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

We have incurred significant operating losses since our inception and expect to incur significant losses for the foreseeable future. We may never generate any revenue or become profitable or, if we achieve profitability, we may not be able to sustain it.

We are a clinical-stage biopharmaceutical company that has never generated revenue from the sale of our product candidates. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. To date, we have focused primarily on developing our lead product candidates, mupadolimab, CPI-818 and ciforadenant, and researching additional product candidates. We have incurred significant operating losses since we were founded in January 2014 and have not yet generated any revenue from sales. If our product candidates are not approved, we may never generate any revenue. We incurred a net loss of \$43.2 million, \$6.0 million and \$46.7 million for the years ended December 31, 2021, 2020 and 2019, respectively, and \$8.3 million and \$11.6 million for the three months ended March 31, 2022 and 2021, respectively. We had an accumulated deficit of \$274.7 million as of March 31, 2022. We expect to continue to incur losses for the foreseeable future, and we anticipate these losses will increase as we continue our development of, seek regulatory approval for and, if approved, begin to commercialize mupadolimab, CPI-818 and ciforadenant, and as we develop other product candidates. Even if we achieve profitability in the future, we may not be able to sustain it in subsequent periods. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' equity and results of operations.

We will require substantial additional financing to achieve our goals, and a failure to obtain this necessary capital when needed on acceptable terms, or at all, could force us to delay, limit, reduce or terminate our product development, other operations or commercialization efforts.

Since commencing our operations in 2014, the majority of our efforts have been focused on the research and development of mupadolimab, CPI-818 and ciforadenant. We believe that we will continue to expend substantial resources for the foreseeable future as we continue clinical development of, seek regulatory approval for and, if approved, prepare for the commercialization of ciforadenant, mupadolimab, and CPI-818, as well as product candidates under our other development programs. These expenditures will include costs associated with research and development, conducting preclinical studies and clinical trials, obtaining regulatory approvals, manufacturing and supply, sales and marketing and general operations. In addition, other unanticipated costs may arise. Because the outcome of any clinical trial and/or regulatory approval process is highly uncertain, we may not be able to accurately estimate the actual amounts necessary to successfully complete the development, regulatory approval process and commercialization of mupadolimab, CPI-818 and ciforadenant or any other product candidates.

As of March 31, 2022, we had capital resources consisting of cash, cash equivalents and marketable securities of \$62.9 million. We do not expect our existing capital resources to be sufficient to enable us to fund the completion of all of our ongoing and planned clinical trials and remaining development program of any of ciforadenant, mupadolimab or CPI-818 through commercialization. In addition, while Angel Pharmaceuticals has received outside investment of approximately \$41.0 million in connection with its formation and licensing of certain of our intellectual property, such cash is not available for our use. Our operating plan may change as a result of many factors, including those described below as well as others currently unknown to us, and we may need to seek additional funds sooner than planned, through public or private equity, including pursuant to the 2020 Sales Agreement and 2021 Sales Agreement with Jefferies, debt financings or other sources, such as strategic collaborations. Such financing would result in dilution to stockholders, imposition of debt covenants and repayment obligations or other restrictions that may affect our business. If we raise additional capital through strategic collaboration agreements, we may have to relinquish valuable rights to our product candidates, including possible future revenue streams. For example, in October 2020 we formed Angel Pharmaceuticals with a group of investors in China to create a new China-based biopharmaceutical company with a mission to bring innovative quality medicines to Chinese patients for treatment of serious diseases including cancer, autoimmune diseases

and infectious diseases. We granted Angel Pharmaceuticals a license to rights to develop and commercialize our three clinical-stage candidates – mupadolimab, CPI-818 and ciforadenant – in greater China and Angel obtained global rights to our BTK inhibitor preclinical programs. In addition, additional funding may not be available to us on acceptable terms, or at all, and any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. Furthermore, even if we believe we have sufficient funds for our current or future operating plans, we may seek additional capital due to favorable market conditions or strategic considerations.

The amount and timing of any expenditures needed to implement our development and commercialization programs will depend on numerous factors, including, but not limited to:

- the type, number, scope, progress, expansions, results of and timing of our ongoing and planned clinical trials
 of mupadolimab, CPI-818 and ciforadenant and any of our planned preclinical studies and clinical trials of
 other product candidates which we are pursuing or may choose to pursue in the future;
- the impact of changes in the COVID-19 pandemic, including the impact of vaccines and therapeutic treatments:
- the need for, and the progress, costs and results of, any additional clinical trials of mupadolimab, CPI-818
 and ciforadenant or any of our other product candidates we may initiate based on the results of our planned
 clinical trials or discussions with the United States Food and Drug Administration ("FDA") or other
 regulatory agencies, including any additional trials the FDA or other regulatory agencies may require;
- the costs of obtaining, maintaining and enforcing our patents and other intellectual property rights;
- the costs and timing of obtaining or maintaining manufacturing for mupadolimab, CPI-818 and ciforadenant
 and our other product candidates, including commercial manufacturing if any product candidate is approved;
- the costs and timing of establishing sales and marketing capabilities;
- our ability to achieve sufficient market acceptance, coverage and reimbursement from third-party payors and adequate market share for our product candidates;
- the terms and timing of establishing collaborations, license agreements and other partnerships;
- whether the FDA or other regulatory agencies accepts data from any clinical trials of our product candidates conducted by Angel Pharmaceuticals in China;
- costs associated with any new product candidates that we may develop, in-license or acquire;
- Angel Pharmaceuticals' ability to develop and commercialize product candidates in China;
- general economic conditions, such as rising inflation;
- the effect of competing technological and market developments;
- our ability to attract, hire and retain qualified personnel;
- our ability to establish and maintain partnering arrangements for development; and
- the costs associated with being a public company.

Several of these factors are outside of our control and if we are unable to obtain funding on a timely basis, we will be unable to complete the clinical trials for mupadolimab, CPI-818 and ciforadenant and our other product candidates, and we may be required to significantly curtail some or all of our activities.

The COVID-19 pandemic could adversely impact our business, including our clinical trials, and financial condition.

The COVID-19 pandemic has spread to most countries, including the United States and European and Asia-Pacific countries, including countries in which we have planned or active clinical trial sites. As the COVID-19 pandemic continues to spread around the globe, we will likely experience disruptions that could severely impact our business and clinical trials, including:

- delays or difficulties in enrolling patients in our clinical trials;
- delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel
 imposed or recommended by federal or state governments, employers and others or interruption of clinical
 trial subject visits and study procedures, the occurrence of which could affect the integrity of clinical trial
 data;
- risk that participants enrolled in our clinical trials will contract COVID-19 while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events:
- limitations in employee resources that would otherwise be focused on the conduct of our clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people;
- delays in receiving authorization from local regulatory authorities to initiate our planned clinical trials;
- delays in clinical sites receiving the supplies and materials needed to conduct our clinical trials;
- interruption in global shipping that may affect the transport of clinical trial materials, such as investigational drug product used in our clinical trials;
- changes in local regulations as part of a response to the COVID-19 pandemic which may require us to change
 the ways in which our clinical trials are conducted, which may result in unexpected costs, or to discontinue
 such clinical trials altogether;
- interruptions or delays in preclinical studies due to restricted or limited operations at our research and development laboratory facilities;
- delays in necessary interactions with local regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees; and
- refusal of the FDA to accept data from clinical trials in affected geographies outside the United States.

In addition, the spread of the COVID-19 pandemic has had an impact and may continue to severely impact the trading price of shares of our common stock and could further severely impact our ability to raise additional capital on a timely basis or at all.

The COVID-19 pandemic continues to rapidly evolve. The extent to which the COVID-19 pandemic may impact our business, including our clinical trials, and financial condition will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the ultimate geographic spread of the disease, the duration of the pandemic, travel restrictions and social distancing in the United States and other countries, business closures or business disruptions and the effectiveness of actions taken in the United States and other countries to contain and treat the disease.

Risks Related to the Discovery and Development of Our Product Candidates

Our product candidates are in various stages of development and may fail or suffer delays that materially and adversely affect their commercial viability. If we are unable to advance our product candidates through clinical development, obtain regulatory approval and ultimately commercialize such product candidates, or experience significant delays in doing so, our business will be materially harmed.

We have invested a significant portion of our efforts and financial resources in the development of our most advanced product candidates, mupadolimab, ciforadenant and CPI-818. We have no products on the market and our ability to achieve and sustain profitability depends on obtaining regulatory approvals for and successfully commercializing our product candidates, either alone or with third parties. Before obtaining regulatory approval for the commercial distribution of our product candidates, we or our collaborator must conduct extensive preclinical tests and clinical trials to demonstrate sufficient safety and efficacy of our product candidates in patients.

As a result, we may not have the financial resources to continue development of, or to modify existing or enter into new collaborations for, a product candidate if we experience any issues that delay or prevent regulatory approval of, or our ability to commercialize, product candidates, including:

- negative or inconclusive results from our clinical trials, the clinical trials of our collaborators, including Angel Pharmaceuticals, or the clinical trials of others for product candidates similar to ours, leading to a decision or requirement to conduct additional preclinical testing or clinical trials or abandon a program;
- changes in the COVID-19 pandemic, including the impact of vaccines and therapeutic treatments;
- product-related side effects experienced by participants in our clinical trials, the clinical trials of our collaborators
 or by individuals using drugs or therapeutic biologics similar to our product candidates;
- the extent to which the COVID-19 pandemic may impact our clinical trials;
- delays in submitting Investigational New Drug applications ("INDs") or comparable foreign applications or delays or failure in obtaining the necessary approvals from regulators to commence a clinical trial, or a suspension or termination of a clinical trial once commenced;
- conditions imposed by the FDA or comparable foreign authorities regarding the scope or design of our clinical trials;
- delays in enrolling research subjects in clinical trials;
- high drop-out rates of research subjects;
- inadequate supply or quality of product candidate components or materials or other supplies necessary for the conduct of our clinical trials or the clinical trials of our collaborators;

- greater than anticipated clinical trial costs;
- delay in the development, approval or certification of companion diagnostic tests for our product candidates;
- unfavorable FDA or other regulatory agency inspection and review of a clinical trial site;
- failure of our third-party contractors or investigators to comply with regulatory requirements or otherwise meet their contractual obligations in a timely manner, or at all;
- delays and changes in regulatory requirements, policy and guidelines, including the imposition of additional regulatory oversight around clinical testing generally or with respect to our technology in particular; or
- varying interpretations of data by the FDA and similar foreign regulatory agencies.

We could find that the product candidates we or our collaborators pursue are not safe or effective. Furthermore, if one or more of our product candidates generally prove to be ineffective, unsafe or commercially unviable, the development of our entire platform and pipeline could be delayed, potentially permanently. Any of these occurrences may materially and adversely affect our business, financial condition, results of operations and prospects.

Of the large number of drugs in development in the pharmaceutical industry, only a small percentage result in the submission of a NDA or BLA to the FDA or comparable marketing applications to foreign regulatory authorities, and even fewer are approved for commercialization. Furthermore, even if we do receive regulatory approval to market ciforadenant, mupadolimab or CPI-818, any such approval may be subject to limitations on the indicated uses for which we may market the product. Accordingly, even if we are able to obtain the requisite financing to continue to fund our development programs, we cannot assure our stockholders that ciforadenant, mupadolimab or CPI-818 will be successfully developed or commercialized. If we or any of our existing or potential future collaborators are unable to develop, or obtain regulatory approval for, or, if approved, successfully commercialize ciforadenant, mupadolimab or CPI-818, we may not be able to generate sufficient revenue to continue our business.

Clinical drug development involves a lengthy and expensive process with an uncertain outcome, and the results of preclinical studies and early clinical trials are not necessarily predictive of future results. Any product candidate we or any of our existing or potential future collaborators advance into clinical trials, including mupadolimab, CPI-818 and ciforadenant, may not have favorable results in later clinical trials, if any, or receive regulatory approval.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials.

Furthermore, our ongoing and planned clinical trials will need to demonstrate sufficient safety and efficacy for approval by regulatory authorities in larger patient populations. Since the initiation of our Phase 1/1b clinical trial in January 2016, ciforadenant has been administered to more than 300 cancer patients and, while it has generally been well tolerated, there have been possibly drug-related or drug-related serious adverse events observed during the trial, and limited information is available concerning long-term safety and efficacy. It remains possible that patients enrolled in our Phase 1/1b clinical trial or our amended Phase 1b/2 clinical trial for ciforadenant could respond in unexpected ways. Our Phase 1/1b and our amended Phase 1b/2 clinical trials are conducted in patients with advanced cancers who have failed other approved therapies for their disease, and as such, it may be difficult to establish safety and efficacy in this type of patient population. Furthermore, a portion of our Phase 1/1b clinical trial, our amended Phase 1b/2 clinical trial and Genentech's Phase 1b/2 clinical trial under our collaboration agreement, includes the administration of ciforadenant in combination with Genentech's cancer immunotherapy, Tecentriq, which could exacerbate immune system related

adverse events, cause increased toxicity or otherwise lead to unexpected adverse events. As a result, there can be no assurance that the results of historical clinical studies of ciforadenant conducted by third parties or the results of our clinical studies to-date will be indicative of the ongoing results of our Phase 1/1b clinical trial or amended Phase 1b/2 clinical trial, Genentech's Phase 1b/2 clinical trial or any future clinical trial of ciforadenant.

In March 2018, we began enrolling patients in our Phase 1/1b trial evaluating mupadolimab in cancer patients. The trial is designed to enroll successive cohorts of patients with advanced cancers who will receive increasing doses of mupadolimab both alone, or in combination with ciforadenant and/or pembrolizumab. As of February 15, 2022, mupadolimab has been generally well tolerated in the clinical trial at doses up to 24 mg/kg. However, CD73 is involved in several physiological systems and the administration of anti-CD73 antibodies such as mupadolimab could result in unforeseen safety issues. Similar to our Phase 1/1b clinical trial of ciforadenant, it is possible that patients enrolled in our Phase 1/1b clinical trial for mupadolimab could respond in unexpected ways and that the administration of mupadolimab in combination with ciforadenant and pembrolizumab could exacerbate immune system related adverse events. As a result, there can be no assurance that we will be able to generate favorable safety and efficacy data for mupadolimab or that we will be able to successfully complete our Phase 1/1b clinical trial.

In March 2019, we initiated a multi-center Phase 1/1b clinical trial evaluating CPI-818 in patients with various malignant T-cell lymphomas. Similar to our clinical trials of ciforadenant and mupadolimab, it is possible that patients enrolled in our Phase 1/1b clinical trial for CPI-818 could respond in unexpected ways.

Under our collaboration with Angel Pharmaceuticals, it will be responsible for the clinical development and commercialization, including all related expenses, of the licensed pipeline programs in greater China, and for the preclinical BTK program globally. It plans to initiate clinical trials in greater China for mupadolimab, CPI-818 and ciforadenant in the next 12 to 18 months and such trials will be subject to many of the same risks as our ongoing clinical programs.

For the foregoing reasons, we cannot be certain that our ongoing or planned clinical trials or any other future clinical trials will be successful. Any safety concerns observed in any one of our clinical trials in our targeted indications could limit the prospects for regulatory approval of our product candidates in those and other indications, which could have a material adverse effect on our business, financial condition and results of operations.

In addition, the FDA's and other regulatory authorities' policies with respect to clinical trials may change and additional government regulations may be enacted. For instance, the regulatory landscape related to clinical trials in the European Union ("EU") recently evolved. The EU Clinical Trials Regulation ("CTR") which was adopted in April 2014 and repeals the EU Clinical Trials Directive, became applicable on January 31, 2022. While the Clinical Trials Directive required a separate clinical trial application ("CTA") to be submitted in each member state, to both the competent national health authority and an independent ethics committee, the CTR introduces a centralized process and only requires the submission of a single application to all member states concerned. The CTR allows sponsors to make a single submission to both the competent authority and an ethics committee in each member state, leading to a single decision per member state. The assessment procedure of the CTA has been harmonized as well, including a joint assessment by all member states concerned, and a separate assessment by each member state with respect to specific requirements related to its own territory, including ethics rules. Each member state's decision is communicated to the sponsor via the centralized EU portal. Once the CTA is approved, clinical study development may proceed. The CTR foresees a three-year transition period. The extent to which ongoing and new clinical trials will be governed by the CTR varies. For clinical trials whose CTA was made under the Clinical Trials Directive before January 31, 2022, the Clinical Trials Directive will continue to apply on a transitional basis for three years. Additionally, sponsors may still choose to submit a CTA under either the Clinical Trials Directive or the CTR until January 31, 2023 and, if authorized, those will be governed by the Clinical Trials Directive until January 31, 2025. By that date, all ongoing trials will become subject to the provisions of the CTR. Compliance with the CTR requirements by us and our third-party service providers, such as clinical research organizations ("CROs"), may impact our developments plans.

If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies governing clinical trials, our development plans may also be impacted.

Any termination or suspension of, or delays in the commencement or completion of, our planned clinical trials could result in increased costs to us, delay or limit our ability to generate revenue and adversely affect our commercial prospects.

Before we can initiate clinical trials in the United States or in foreign countries for any of our product and development candidates, we must submit the results of preclinical testing to the FDA or foreign regulatory authorities along with other information, including information about product candidate chemistry, manufacturing and controls and our proposed clinical trial protocol, as part of an IND or similar application. In addition, we may rely in part on preclinical, clinical and quality data generated by CROs and other third parties for regulatory submissions for our product candidates. If these third parties do not make timely regulatory submissions for our product candidates, it will delay our plans for our clinical trials. If those third parties do not make this data available to us, we will likely have to develop all necessary preclinical and clinical data on our own, which will lead to significant delays and increase development costs of the product candidate. In addition, the FDA or foreign regulatory authorities may require us to conduct additional preclinical testing for any product candidate before it allows us to initiate clinical testing under any IND or similar, which may lead to additional delays and increase the costs of our preclinical development. Delays in the completion of our planned clinical trials for product candidates could significantly affect our product development costs.

While we initiated our Phase 1/1b clinical trial for ciforadenant in January 2016, our Phase 1/1b clinical trial for mupadolimab in cancer in March 2018 and our Phase 1/1b clinical trial for CPI-818 in March 2019, we do not know whether any of our other planned trials, including a planned Phase 2 clinical trial evaluating mupadolimab as a potential first-line therapy in NSCLC patients and a planned Phase 2 clinical trial evaluating ciforadenant as a potential first-line therapy in RCC patients, will begin on time in the future or whether any of our trials will be completed on schedule, if at all. The commencement and completion of clinical trials can be delayed for a number of reasons, including delays related to:

- the FDA or foreign regulatory authorities failing to grant permission to proceed or placing a clinical trial on hold;
- subjects failing to enroll or remain in our trial at the rate we expect;
- subjects choosing an alternative treatment for the indication for which we are developing mupadolimab, CPI-818
 and ciforadenant or other product candidates, or participating in competing clinical trials;
- lack of adequate funding to continue the clinical trial;
- subjects experiencing severe or unexpected drug-related adverse effects;
- a facility manufacturing mupadolimab, CPI-818 and ciforadenant, any of our other product candidates or any of
 their components being ordered by the FDA or other regulatory authorities to temporarily or permanently shut
 down due to violations of good manufacturing practice ("cGMP") regulations or other applicable requirements, or
 infections or cross-contaminations of product candidates in the manufacturing process;
- any changes to our manufacturing process that may be necessary or desired;
- any failure or delay in reaching an agreement with CROs and clinical trial sites;
- third-party clinical investigators losing the licenses or permits necessary to perform our clinical trials, not
 performing our clinical trials on our anticipated schedule or consistent with the clinical trial protocol, good
 clinical practices ("GCP") or regulatory requirements or other third parties not performing data collection or
 analysis in a timely or accurate manner;
- third-party contractors becoming debarred or suspended or otherwise penalized by the FDA or other government or regulatory authorities for violations of regulatory requirements, in which case we may need to

find a substitute contractor, and we may not be able to use some or all of the data produced by such contractors in support of our marketing applications;

- one or more Institutional Review Boards ("IRBs") or other reviewing bodies refusing to approve, suspending or terminating the trial at an investigational site, precluding enrollment of additional subjects, or withdrawing its approval of the trial; or
- patients failing to complete a trial or return for post-treatment follow-up.

In addition, disruptions caused by the COVID-19 pandemic may increase the likelihood that we encounter such difficulties or delays in initiating, enrolling, conducting or completing our planned and ongoing clinical trials. We could also encounter delays if a clinical trial is suspended or terminated by us, by the IRBs of the institutions in which such trials are being conducted, by the Data Safety Monitoring Board for such trial or by the FDA or other regulatory authorities. Such authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. In addition, changes in regulatory requirements and policies may occur, and we may need to amend clinical trial protocols to comply with these changes. Amendments may require us to resubmit our clinical trial protocols to IRBs or other reviewing bodies for reexamination, which may impact the costs, timing or successful completion of a clinical trial.

If we experience delays in the completion of, or termination of, any clinical trial of our product candidates, the commercial prospects of our product candidates will be harmed, and our ability to generate product revenues from any of these product candidates will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our product candidate development and approval process and jeopardize our ability to commence product sales and generate revenues. See also the risk factor below titled "If we encounter difficulties enrolling subjects in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected."

In addition, many of the factors that cause, or lead to, termination or suspension of, or a delay in the commencement or completion of, clinical trials may also ultimately lead to the denial of regulatory approval of a product candidate. For example, if we make manufacturing or formulation changes to our product candidates, we may need to conduct additional studies to bridge our modified product candidates to earlier versions. Further, if one or more clinical trials are delayed, our competitors may be able to bring products to market before we do, and the commercial viability of mupadolimab, CPI-818 and ciforadenant or other product candidates could be significantly reduced. Any of these occurrences may harm our business, financial condition and prospects significantly.

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

From time to time, we may publicly disclose interim, top-line or preliminary data from our clinical trials, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the top-line or preliminary results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Top-line or preliminary data also remain subject to audit and verification procedures that may result in the final data being materially different from the top-line or preliminary data we previously published. As a result, top-line and preliminary data should be viewed with caution until the final data are available.

From time to time, we may also disclose interim data from our preclinical studies and clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Adverse differences between interim data and final data could significantly harm our business prospects. Further, disclosure of interim data by us or by our competitors could result in volatility in the price of our common stock.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is material or otherwise appropriate information to include in our disclosure.

If the interim, top-line or preliminary data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our product candidates may be harmed, which could harm our business, operating results, prospects or financial condition.

Our product candidates are subject to extensive regulation, compliance with which is costly and time consuming, and such regulation may cause unanticipated delays or prevent the receipt of the required approvals to commercialize our product candidates.

The clinical development, manufacturing, labeling, storage, record-keeping, advertising, promotion, import, export, marketing and distribution of our product candidates are subject to extensive regulation by the FDA in the United States and by comparable authorities in foreign markets. In the United States, we are not permitted to market our product candidates until we receive regulatory approval from the FDA. The process of obtaining regulatory approval is expensive, often takes many years and can vary substantially based upon the type, complexity and novelty of the product candidates involved, as well as the target indications and patient population. Approval policies or regulations may change, and the FDA and comparable authorities have substantial discretion in the drug approval process, including the ability to delay, limit or deny approval of a product candidate for many reasons. Despite the time and expense invested in clinical development of product candidates, regulatory approval is never guaranteed.

The FDA or comparable foreign regulatory authorities, including in China, can delay, limit or deny approval of a product candidate for many reasons, including:

- such authorities may disagree with the design or implementation of our or any of our existing or potential future collaborators' clinical trials;
- we or any of our existing or potential future collaborators may be unable to demonstrate to the satisfaction of the FDA or other regulatory authorities that a product candidate is safe and effective for any indication;
- such authorities may not accept clinical data from trials which are conducted at clinical facilities or in countries where the standard of care is potentially different from that of the United States;
- we or any of our existing or potential future collaborators may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- such authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- approval may be granted only for indications that are significantly more limited than what we apply for and/or with other significant restrictions on distribution and use;

- such authorities may find deficiencies in the manufacturing processes or facilities of third-party
 manufacturers with which we or any of our existing or potential future collaborators contract for clinical and
 commercial supplies; or
- the approval policies or regulations of such authorities may significantly change in a manner rendering our or any of our existing or potential future collaborators' clinical data insufficient for approval.

With respect to foreign markets, approval procedures vary among countries and, in addition to the foregoing risks, may involve additional product testing, administrative review periods and agreements with pricing authorities. In addition, events raising questions about the safety of certain marketed pharmaceuticals may result in increased cautiousness by the FDA and comparable foreign regulatory authorities, including in China, in reviewing new drugs based on safety, efficacy or other regulatory considerations and may result in significant delays in obtaining regulatory approvals. Any delay in obtaining, or inability to obtain, applicable regulatory approvals would prevent us or any of our existing or potential future collaborators from commercializing our product candidates.

We are conducting clinical trials for mupadolimab, CPI-818 and ciforadenant, and we and Angel Pharmaceuticals may in the future, conduct additional clinical trials of product candidates, at sites outside the United States, and the FDA may not accept data from trials conducted in foreign locations.

We are conducting oncology clinical trials with mupadolimab, CPI-818, and ciforadenant in North America, Australia and South Korea. In addition, Angel Pharmaceuticals has initiated a clinical trial in China for CPI-818 and plans to initiate clinical trials for mupadolimab and ciforadenant and we expect its clinical trial activity in China to be part of our planned global pivotal study for ciforadenant. The acceptance of study data from clinical trials conducted outside the U.S. or another jurisdiction by the FDA or comparable foreign regulatory authority may be subject to certain conditions or may not be accepted at all. In cases where data from foreign clinical trials are intended to serve as the sole basis for marketing approval in the U.S., the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the U.S. population and U.S. medical practice; (ii) the trials were performed by clinical investigators of recognized competence and pursuant to GCP regulations; and (iii) the data may be considered valid without the need for an on-site inspection by the FDA, or if the FDA considers such inspection to be necessary, the FDA is able to validate the data through an on-site inspection or other appropriate means. In addition, even where the foreign study data are not intended to serve as the sole basis for approval, the FDA will not accept the data as support for an application for marketing approval unless the study is well-designed and well-conducted in accordance with GCP requirements and the FDA is able to validate the data from the study through an onsite inspection if deemed necessary. Many foreign regulatory authorities have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA or any comparable foreign regulatory authority will accept data from trials conducted outside of the U.S. or the applicable jurisdiction. If the FDA or such foreign regulatory authority does not accept the data from our or Angel Pharmaceuticals' clinical trials for ciforadenant, mupadolimab or CPI-818, or any other product candidates, it would likely result in the need for additional trials, which would be costly and time-consuming and delay or permanently halt our development of mupadolimab, CPI-818 and ciforadenant or any other product candidates.

If we are required by the FDA or similar regulatory authorities to obtain approval, clearance or certification of a companion diagnostic device in connection with approval of one of our product candidates, and we do not obtain or face delays in obtaining approval, clearance or certification of a companion diagnostic device, we will not be able to commercialize the product candidate and our ability to generate revenue will be materially impaired.

According to FDA guidance, if the FDA determines that a companion diagnostic device is essential to the safe and effective use of a novel therapeutic product or indication, the FDA generally will not approve the therapeutic product or new therapeutic product indication if the companion diagnostic is not also approved or cleared for that indication. We plan to collaborate with patient diagnostic companies during our clinical trial enrollment process to help identify patients with tumor gene alterations that we believe are most likely to respond to our product candidates. If a satisfactory companion diagnostic is not commercially available, we may be required to create or obtain one that would be subject to regulatory approval requirements. The process of obtaining or creating such diagnostic is time consuming and costly.

Companion diagnostics are developed in conjunction with clinical programs for the associated product and are subject to regulation as medical devices by the FDA and comparable foreign regulatory authorities, and, to date, the FDA has required premarket approval of all companion diagnostics for cancer therapies. Generally, when a companion diagnostic is essential to the safe and effective use of a therapeutic product, the FDA requires that the companion diagnostic be approved before or concurrent with approval of the therapeutic product and before a product can be commercialized. The approval of a companion diagnostic as part of the therapeutic product's labeling limits the use of the therapeutic product to only those patients who express the specific genetic alteration that the companion diagnostic was developed to detect.

If the FDA or a comparable foreign regulatory authority requires approval, certification or clearance of a companion diagnostic for any of our product candidates, whether before or after the product candidate obtains marketing approval, we and/ or third-party collaborators may encounter difficulties in developing and obtaining approval, clearance of certification for these companion diagnostics. Any delay or failure by us or third-party collaborators to develop or obtain regulatory approval, clearance of certification of a companion diagnostic could delay or prevent approval or continued marketing of our related product candidates. We may also experience delays in developing a sustainable, reproducible and scalable manufacturing process for the companion diagnostic or in transferring that process to commercial partners or negotiating insurance reimbursement plans, all of which may prevent us from completing our clinical trials or commercializing our product candidates, if approved, on a timely or profitable basis, if at all.

Approval, clearance or certification of companion diagnostics may be subject to further legislative or regulatory reforms notably in the EU. On May 25, 2017, the new In Vitro Medical Devices Regulation ("IVDR") entered into force. The IVDR repeals and replaces the EU In Vitro Diagnostic Medical Devices Directive. Unlike directives, which must be implemented into the national laws of the EU member states, regulations are directly applicable, i.e., without the need for adoption of EU member states laws implementing them, in all EU member states and are intended to eliminate current differences in the regulation of medical devices among EU member states. The IVDR, among other things, is intended to establish a uniform, transparent, predictable and sustainable regulatory framework across the EU for medical devices and ensure a high level of safety and health while supporting innovation. The IVDR will, however, only become applicable in May 2022, and on October 14, 2021, the European Commission proposed a "progressive" roll-out of the IVDR to prevent disruption in the supply of in vitro diagnostic medical devices. The European Parliament and Council voted to adopt the proposed regulation on December 15, 2021 and the regulation entered into force on January 2022. The IVDR will fully apply on May 26, 2022 but there will be a tiered system extending the grace period for many devices (depending on their risk classification) before they have to be fully compliant with the regulation.

The regulation of companion diagnostics will be subject to further requirements once the IVDR becomes applicable as it introduces a new classification system for companion diagnostics which are now specifically defined as diagnostic tests that support the safe and effective use of a specific medicinal product, by identifying patients that are suitable or unsuitable for treatment. Companion diagnostics will have to undergo a conformity assessment by a notified body. Before it can issue a CE certificate, the notified body must seek a scientific opinion from the EMA on the suitability of the companion diagnostic to the medicinal product concerned if the medicinal product falls exclusively within the scope of the centralized procedure for the authorization of medicines, or the medicinal product is already

authorized through the centralized procedure, or a marketing authorization application for the medicinal product has been submitted through the centralized procedure. For other substances, the notified body can seek the opinion from a national competent authorities or the EMA.

These modifications may make it more difficult and costly for us to obtain regulatory clearances, approvals or certification for our companion diagnostics or to manufacture, market or distribute our products after clearance or approval is obtained.

If we encounter difficulties enrolling subjects in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

Subject enrollment, a significant factor in the timing of clinical trials, is affected by many factors including the size and nature of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the design of the clinical trial, the risk that enrolled patients will not complete a clinical trial, our ability to recruit clinical trial investigators with the appropriate competencies and experience, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any new drugs that may be approved for the indications we are investigating. We will be required to identify and enroll a sufficient number of subjects for each of our clinical trials. Potential subjects for any planned clinical trials may not be adequately diagnosed or identified with the diseases which we are targeting or may not meet the entry criteria for our studies. We also may encounter difficulties in identifying and enrolling subjects with a stage of disease appropriate for our planned clinical trials. We may not be able to initiate or continue clinical trials if we are unable to locate a sufficient number of eligible subjects to participate in the clinical trials required by the FDA or other foreign regulatory agencies. In addition, the process of finding and diagnosing subjects may prove costly.

We are enrolling patients with NSCLC and HNSCC in our Phase 1/1b clinical trial of mupadolimab and patients with T-cell lymphomas in our Phase 1/1b clinical trial of CPI-818 and plan to enroll patients with NSCLC in our planned Phase 2 clinical trial of mupadolimab and patients with RCC in our planned Phase 2 clinical trial of ciforadenant. If patients are unwilling to participate in our studies for any reason, including the existence of competitive clinical trials for similar patient populations, the availability of approved therapies or negative perceptions of the safety or efficacy of our product candidates, the timeline for recruiting subjects, conducting studies and obtaining regulatory approval of our product candidates may be delayed. Our inability to enroll a sufficient number of subjects for any of our future clinical trials would result in significant delays or may require us to abandon one or more clinical trials altogether.

We believe we have appropriately considered the above factors in our trials when determining expected clinical trial timelines, but we cannot assure our stockholders that our assumptions are correct or that we will not experience delays in enrollment, which would result in the delay of completion of such trials beyond our expected timelines. Furthermore, the COVID-19 pandemic could significantly affect enrollment in our future and planned clinical trials to an extent that we have not considered within our expected timelines.

The occurrence of serious complications or side effects in connection with use of our product candidates, either in clinical trials or post-approval, could lead to discontinuation of our clinical development programs, refusal of regulatory authorities to approve our product candidates or, post-approval, revocation of marketing authorizations or refusal to approve new indications, which could severely harm our business, prospects, operating results and financial condition.

During the conduct of clinical trials, patients report changes in their health, including illnesses, injuries and discomforts, to their study doctor. Often, it is not possible to determine whether or not the product candidate being studied caused these conditions. It is possible that as we test our product candidates in larger, longer and more extensive clinical programs with different dosing regimens and in combination with other immunotherapies, or as use of these product candidates becomes more widespread if they receive regulatory approval, illnesses, injuries, discomforts and other adverse events that were observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, will be reported by subjects. For example, possibly drug-related or drug-related serious adverse events have been observed during our Phase 1/1b clinical trial and our amended Phase 1b/2 clinical trial in patients receiving

combination therapy with ciforadenant and Tecentriq include hemolytic anemia, encephalitis, hepatitis, pneumonitis, mucositis, myocarditis and dermatitis. Other toxicities observed during our Phase 1/1b clinical trial and our amended Phase 1b/2 clinical trial were mild and are commonly seen in patients with advanced cancers, such as nausea, vomiting, fatigue, rash, diarrhea, fever, abdominal pain, cough, constipation and decreased appetite. Other immune-oncology drugs also have been found occasionally to induce immune related toxicities such as colitis, hepatitis, pneumonitis, meningitis, myocarditis and various endocrine diseases.

Many times side effects are only detectable after investigational products are tested in large-scale, Phase 3 clinical trials or, in some cases, after they are made available to patients on a commercial scale after approval. Results of our current clinical trials and any future clinical trials we undertake could reveal a high and unacceptable severity and prevalence of these or other side effects. In such an event, our trials could be suspended or terminated, and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny approval of our product candidates for any or all targeted indications. Drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

In addition, if one or more of our product candidates receives marketing approval, and we or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw approvals of such product;
- regulatory authorities may require additional warnings on the label;
- we may be required to create a medication guide outlining the risks of such side effects for distribution to patients;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

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

We may not be successful in our efforts to identify or discover additional product candidates.

The success of our business depends primarily upon our ability to develop and commercialize mupadolimab, CPI-818 and ciforadenant. Although mupadolimab, CPI-818 and ciforadenant are currently in clinical development, our research programs may fail to identify other potential product candidates, or advance them into and through clinical development for a number of reasons. Our research methodology may be unsuccessful in identifying other potential product candidates or our other potential product candidates may be shown to have harmful side effects or may have other characteristics that may make the products unmarketable or unlikely to receive marketing approval. It may also take greater human and financial resources to identify additional therapeutic opportunities for our product candidates or to develop suitable potential product candidates through our research programs than we will possess, thereby limiting our ability to diversify and expand our product candidate portfolio.

Risks Related to Our Reliance on Third Parties

We rely, and expect to continue to rely, on third parties to conduct our clinical trials. If these third parties do not meet our deadlines or otherwise conduct the trials as required, our clinical development programs could be delayed or unsuccessful and we may not be able to obtain regulatory approval for or commercialize our product candidates when expected, or at all.

We do not have the ability to conduct all aspects of our preclinical testing or clinical trials ourselves. As a result, we are dependent on third parties to conduct our ongoing and planned clinical trials for mupadolimab, CPI-818 and ciforadenant and expect to continue to be dependent on third parties to conduct any additional future clinical trials of mupadolimab, CPI-818 and ciforadenant and preclinical and clinical trials for our other product candidates. The timing of the initiation and completion of these trials will therefore be controlled by such third parties and may occur at times substantially different from our estimates. Specifically, we use and rely on medical institutions, clinical investigators, CROs and consultants to conduct our trials in accordance with our clinical protocols and regulatory requirements. Such CROs, investigators and other third parties play a significant role in the conduct of these trials and subsequent collection and analysis of data, and we will control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards, and our reliance on the CROs and other third parties does not relieve us of our regulatory responsibilities. We and our CROs are required to comply with GCP requirements, which are regulations and guidelines enforced by the FDA, the Competent Authorities of the member states of the European Union and comparable foreign regulatory authorities for all of our product candidates in clinical development.

Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our CROs or trial sites fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable, and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. In addition, our clinical trials must be conducted with product produced under cGMP or similar regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

There is no guarantee that any such CROs, investigators or other third parties will devote adequate time and resources to such trials or perform as contractually required. If any of these third parties fail to meet expected deadlines, adhere to our clinical protocols or meet regulatory requirements, or otherwise performs in a substandard manner, our clinical trials may be extended, delayed or terminated. These difficulties may be exacerbated as a result of the ongoing COVID-19 pandemic.

If any of our clinical trial sites terminates for any reason, including as a result of the COVID-19 pandemic, we may experience the loss of follow-up information on subjects enrolled in such clinical trials unless we are able to transfer those subjects to another qualified clinical trial site, which may be difficult or impossible.

In addition, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and may receive cash or equity compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, or the FDA concludes that the financial relationship may have affected the interpretation of the study, the integrity of the data generated at the applicable clinical trial site may be questioned and the utility of the clinical trial itself may be jeopardized, which could result in the delay or rejection of any NDA, BLA or other applications we submit by the FDA or foreign regulatory authorities. Any such delay or rejection could prevent us from commercializing mupadolimab, CPI-818 and ciforadenant or our other product candidates.

We rely on third parties to conduct some or all aspects of our manufacturing, research and preclinical and clinical testing, and these third parties may not perform satisfactorily.

We do not expect to independently conduct all aspects of our manufacturing, research and preclinical and clinical testing. We currently rely, and expect to continue to rely, on third parties with respect to these items. If these

third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our studies in accordance with regulatory requirements or our stated study plans and protocols, we may not be able to complete, or may be delayed in completing, the preclinical and clinical studies required to support future IND or other submissions and approval of our product candidates. These difficulties may be exacerbated as a result of the ongoing COVID-19 pandemic. Furthermore, any of these third parties may terminate its engagement with us at any time. If we need to enter into alternative arrangements, it could delay our product development activities, and we may not be able to negotiate alternative arrangements on commercially reasonable terms, or at all.

We and our contract manufacturers are subject to significant regulation with respect to manufacturing our products and the contract manufacturers on which we rely may not continue to meet regulatory requirements.

We do not currently have nor do we plan to acquire the infrastructure or internal capability to manufacture our clinical drug supplies for use in the conduct of our trials, and we lack the resources and the capability to manufacture any of our product candidates on a clinical or commercial scale. We currently rely on several different manufacturers who supply different parts of the ciforadenant and CPI-818 molecules, on one manufacturer for mupadolimab drug substance and on other third-party manufacturers to produce our other product candidates.

All entities involved in the preparation of the apeutics for clinical studies or commercial sale, including our existing contract manufacturers for our product candidates, are subject to extensive regulation. Components of a finished therapeutic product approved for commercial sale or used in late-stage clinical studies must be manufactured in accordance with cGMP requirements. These regulations govern manufacturing processes and procedures, including record keeping, and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Poor control of production processes can lead to the introduction of adventitious agents or other contaminants, or to inadvertent changes in the properties or stability of our product candidates that may not be detectable in final product testing. We or our contract manufacturers must supply all necessary documentation in support of an NDA or BLA on a timely basis and must adhere to the FDA's Good Laboratory Practice regulations and cGMP regulations enforced by the FDA through its facilities inspection program. Our facilities and quality systems and the facilities and quality systems of some or all of our third-party contractors must pass a pre-approval inspection for compliance with the applicable regulations as a condition of regulatory approval of our product candidates or any of our other potential products. In addition, the regulatory authorities may, at any time, audit or inspect our manufacturing facilities or those of our third-party contractors involved with the preparation of our product candidates or the associated quality systems for compliance with the regulations applicable to the activities being conducted. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with cGMPs.

The regulatory authorities also may, at any time following approval of a product for sale, audit the manufacturing facilities of our third-party contractors. If any such inspection or audit identifies a failure to comply with applicable regulations or if a violation of our product specifications or applicable regulations occurs independent of such an inspection or audit, we or the relevant regulatory authority may require remedial measures that may be costly and/or time-consuming for us or a third party to implement and that may include the temporary or permanent suspension of a clinical study or commercial sales or the temporary or permanent closure of a facility. Such violations could also result in civil and/or criminal penalties, and the FDA may impose regulatory sanctions including, among other things, refusal to approve a pending application for a new drug product or biologic product, revocation of a pre-existing approval or closing one or more manufacturing facilities.

In addition, if supply from an approved manufacturer is interrupted, there could be a significant disruption in commercial supply. An alternative manufacturer would need to be qualified through an NDA or BLA supplement which could result in further delay. The regulatory agencies may also require additional studies if a new manufacturer is relied upon for commercial production. Changing manufacturers may involve substantial costs and is likely to result in a delay in our desired clinical and commercial timelines.

We, or our third-party manufacturers, may be unable to successfully scale-up manufacturing of our product candidates in sufficient quality and quantity, which would delay or prevent us from developing our product candidates and commercializing approved products, if any.

In order to conduct clinical trials of our product candidates, we will need to manufacture them in large quantities. We, or any manufacturing partners, may be unable to successfully increase the manufacturing capacity for any of our product candidates in a timely or cost-effective manner, or at all. In addition, quality issues may arise during scale-up activities. If we or any manufacturing partners are unable to successfully scale up the manufacture of our product candidates in sufficient quality and quantity, the development, testing and clinical trials of that product candidate may be delayed or become infeasible, and regulatory approval or commercial launch of any resulting product may be delayed or not obtained, which could significantly harm our business.

In addition, the supply chain for the manufacturing of our product candidates is complicated and can involve several parties. If we were to experience any supply chain issues, including as a result of the COVID-19 pandemic, our product supply could be seriously disrupted. We expect that the logistical challenges associated with our supply chain will grow more complex as we expand enrollment in our clinical trials for mupadolimab and CPI-818 and as we commence any clinical trials for additional product candidates.

Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

Because we rely on third parties to research and develop and to manufacture our product candidates, we must share trade secrets with them. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, consulting agreements or other similar agreements with our advisors, employees, third-party contractors and consultants prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, including our trade secrets. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's independent discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may have a material adverse effect on our business.

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets, although our agreements may contain certain limited publication rights. For example, any academic institution that we may collaborate with in the future will likely expect to be granted rights to publish data arising out of such collaboration. In the future we may also conduct joint research and development programs that may require us to share trade secrets under the terms of our research and development or similar agreements. Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. A competitor's discovery of our trade secrets would impair our competitive position and have an adverse impact on our business.

Risks Related to Commercialization of Our Product Candidates

If we are unable to commercialize our product candidates or if we experience significant delays in obtaining regulatory approval for, or commercializing, any or all of our product candidates, our business will be materially and adversely affected.

Our ability to generate product revenue will depend heavily on our ability to successfully develop and commercialize our product candidates. We do not expect that such commercialization of any of our product candidates

will occur for at least the next several years, if ever. Our ability to commercialize our product candidates effectively will depend on several factors, including the following:

- successful completion of preclinical studies and clinical trials, including the ability to demonstrate safety and efficacy of our product candidates;
- managing the complexity of our clinical trial designs;
- receipt of marketing approvals from the FDA and similar foreign regulatory authorities;
- establishing commercial manufacturing capabilities by making arrangements with third-party manufacturers;
- successfully launching commercial sales of any approved products, whether alone or in collaboration with others;
- acceptance of any approved products by patients, the medical community and third-party payors;
- establishing market share while competing with other therapies;
- a continued acceptable safety profile of any approved products;
- maintaining compliance with post-approval regulation and other requirements; and
- qualifying for, identifying, registering, maintaining, enforcing and defending intellectual property rights and claims covering our product candidates.

If we experience significant delays or an inability to commercialize our product candidates, our business, financial condition and results of operations will be materially adversely affected.

If we do not achieve our projected development goals in the time frames we announce and expect, the commercialization of our products may be delayed and, as a result, our stock price may decline.

We estimate the timing of the accomplishment of various scientific, clinical, regulatory and other product development goals, which we sometimes refer to as milestones. These milestones may include the commencement or completion of scientific studies and clinical trials and the submission of regulatory filings. From time to time, we may publicly announce the expected timing of some of these milestones. All of these milestones will be based on a variety of assumptions, and the actual timing of these milestones can vary dramatically compared to our estimates, in some cases for reasons beyond our control. For example, the COVID-19 pandemic has had a significant impact on the ability of biopharmaceutical companies to conduct clinical trials and, while we have not yet experienced delays resulting from the pandemic, there can be no assurance that we will be able to avoid such delays in the future. If we do not meet these milestones as publicly announced, the commercialization of our products may be delayed and, as a result, our stock price may decline.

Any approved products could be subject to restrictions or withdrawal from the market, and we may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our product candidates, when and if any of them are approved.

Following potential approval of any of our product candidates, the FDA or foreign regulatory authorities may impose significant restrictions on a product's indicated uses or marketing or impose ongoing requirements for potentially costly and time consuming post-approval studies, post-market surveillance or clinical trials. Following approval, if any, of mupadolimab, CPI-818 and ciforadenant or any other product candidate, such candidate will also be subject to ongoing FDA or foreign regulatory authorities requirements governing the labeling, packaging, storage, distribution,

safety surveillance, advertising, promotion, recordkeeping and reporting of safety and other post-market information. If we or a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions on that product, the manufacturing facility or us, including requesting recall or withdrawal of the product from the market or suspension of manufacturing.

If we or the manufacturing facilities for mupadolimab, CPI-818 and ciforadenant or any other product candidate that may receive regulatory approval, if any, fail to comply with applicable regulatory requirements, a regulatory agency may:

- issue warning letters or untitled letters;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve pending applications or supplements or applications filed by us;
- suspend or impose restrictions on operations, including costly new manufacturing requirements; or
- seize or detain products, refuse to permit the import or export of product or request that we initiate a product

The occurrence of any event or penalty described above may inhibit our ability to commercialize our product candidates and generate revenue.

The FDA has the authority to require a risk evaluation and mitigation strategy ("REMS") as part of an NDA or BLA or after approval, which may impose further requirements or restrictions on the distribution or use of an approved drug, such as limiting prescribing to certain physicians or medical centers that have undergone specialized training, limiting treatment to patients who meet certain safe-use criteria and requiring treated patients to enroll in a registry. Similar risk exist in foreign jurisdictions.

In addition, if mupadolimab, CPI-818 and ciforadenant or any of our other product candidates is approved, our product labeling, advertising and promotion will be subject to regulatory requirements and continuing regulatory review. The FDA and foreign regulatory authorities strictly regulates the promotional claims that may be made about prescription products. In particular, a product may not be promoted for uses that are not approved by the FDA or foreign regulatory authorities as reflected in the product's approved labeling. If we receive marketing approval for a product candidate, physicians may nevertheless prescribe it to their patients in a manner that is inconsistent with the approved label. If we are found to have promoted such off-label uses, we may become subject to significant liability. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant sanctions. The federal government has levied large civil and criminal fines against companies for alleged improper promotion and has enjoined several companies from engaging in off-label promotion. The FDA has also requested that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response, and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize our product candidates.

Further, the FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may be subject to enforcement action and we may not achieve or sustain profitability.

Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire, retain or deploy key leadership and other personnel, or otherwise prevent new or modified products from being developed, approved or commercialized in a timely manner or at all, which could negatively impact our business.

The ability of the FDA and foreign regulatory authorities to review and/or approve new products can be affected by a variety of factors, including government budget and funding levels, statutory, regulatory, and policy changes, the FDA's or foreign regulatory authorities' ability to hire and retain key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's or foreign regulatory authorities' ability to perform routine functions. Average review times at the FDA and foreign regulatory authorities have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies such as the EMA, following its relocation to Amsterdam and resulting staff changes, may also slow the time necessary for new drugs and biologics or modifications to approved drugs or biologics to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical FDA employees and stop critical activities.

Separately, in response to the COVID-19 pandemic, in March 2020, the FDA announced its intention to postpone most inspections of foreign manufacturing facilities, and on March 18, 2020, the FDA temporarily postponed routine surveillance inspections of domestic manufacturing facilities. Subsequently, in July 2020, the FDA resumed certain on-site inspections of domestic manufacturing facilities subject to a risk-based prioritization system. The FDA utilized this riskbased assessment system to assist in determining when and where it was safest to conduct prioritized domestic inspections. Additionally, on April 15, 2021, the FDA began conducting voluntary remote interactive evaluations of certain drug manufacturing facilities and clinical research sites, among other facilities in circumstances where the FDA determines that such remote evaluation would be appropriate based on mission needs and travel limitations. In May 2021, the FDA outlined a detailed plan to move toward a more consistent state of inspectional operations, and in July 2021, the FDA resumed standard inspectional operations of domestic facilities. Since that time, the FDA has continued to monitor and implement changes to its inspectional activities to ensure the safety of its employees and those of the firms it regulates as it adapts to the evolving COVID-19 pandemic. Regulatory authorities outside the United States have adopted similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government shutdown occurs, or if global health concerns continue to prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA or other regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

Even if we receive regulatory approval we still may not be able to successfully commercialize mupadolimab, CPI-818 and ciforadenant or any other product candidate, and the revenue that we generate from sales, if any, could be limited.

Even if mupadolimab, CPI-818 and ciforadenant or any of our other product candidates receive regulatory approval, they may not gain market acceptance among physicians, patients, healthcare payors or the medical community. The degree of market acceptance of our product candidates will depend on a number of factors, including:

- demonstration of clinical efficacy and safety compared to other more-established products;
- the indications for which our product candidates are approved;

- the limitation of our targeted patient population and other limitations or warnings contained in any FDAapproved labeling;
- acceptance of a new formulation by healthcare providers and their patients;
- our ability to obtain and maintain sufficient third-party coverage and reimbursement from government healthcare programs, including Medicare and Medicaid, private health insurers and other third-party payors;
- the willingness of patients to pay out-of-pocket in the absence of third-party coverage and reimbursement;
- the prevalence and severity of any adverse effects;
- pricing and cost-effectiveness;
- the timing of market introduction of our product candidates as well as competitive drugs;
- the effectiveness of our or any of our existing or potential future collaborators' sales and marketing strategies; and
- unfavorable publicity relating to the product candidate.

If any product candidate is approved but does not achieve an adequate level of acceptance by physicians, hospitals, healthcare payors or patients, we may not generate sufficient revenue from that product candidate and may not become or remain profitable. Our efforts to educate the medical community and third-party payors regarding the benefits of mupadolimab, CPI-818 and ciforadenant or any of our other product candidates may require significant resources and may never be successful.

Failure to obtain or maintain adequate coverage and reimbursement for our product candidates, if approved, could limit our ability to market those products and decrease our ability to generate revenue.

Successful commercial sales of any approved products will depend on the availability of adequate coverage and reimbursement from government health administration authorities, private health insurers and other third-party payors. Each third-party payor separately decides which products it will cover and establishes the reimbursement level, and there is no guarantee that any of our product candidates that may be approved for marketing by regulatory authorities will receive adequate coverage or reimbursement levels. Obtaining and maintaining coverage approval for a product candidate is time-consuming, costly and may be difficult. We may be required to conduct expensive pharmacoeconomic studies to justify coverage and reimbursement or the level of coverage and reimbursement relative to other therapies. If coverage and adequate reimbursement are not available or limited, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for drugs and biologics. Even if we obtain coverage for a given product, the resulting reimbursement rates may be inadequate and may affect the demand for, or the price of, any product candidate for which we obtain marketing approval.

Recently enacted legislation, future legislation and healthcare reform measures may increase the difficulty and cost for us to obtain marketing approval for and commercialize our product candidates and affect the prices we may obtain.

In the United States and some foreign jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes to the healthcare system, including cost-containment measures that may

reduce or limit coverage and reimbursement for newly approved drugs and biologics and affect our ability to profitably sell any product candidates for which we obtain marketing approval.

For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively referred to as the ACA, was enacted with a goal of reducing the cost of healthcare and substantially changing the way healthcare is financed by both governmental and private insurers. The ACA, among other things, subjected biological products to potential competition by lower-cost biosimilars; addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected; increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program; extended the rebate program to individuals enrolled in Medicaid managed care organizations; established annual fees and taxes on manufacturers of certain prescription drugs; created a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; and established a new Patient-Centered Outcomes Research Institute to oversee, identify priorities and conduct comparative clinical effectiveness research, along with funding for such research.

Since its enactment, there have been judicial, executive and Congressional challenges to certain aspects of the ACA. On June 17, 2021, the U.S. Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. Prior to the Supreme Court's decision, President Biden issued an executive order to initiate a special enrollment period from February 15, 2021 through August 15, 2021 for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also 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 ACA.

In addition, other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. These new laws, among other things, included aggregate reductions of Medicare payments to providers of 2% per fiscal year that will remain in effect through 2030, with the exception of a temporary suspension from May 1, 2020 through March 31, 2022 and a 1% reduction from April 1, 2022 through June 30, 2022, unless additional Congressional action is taken. In addition, in January 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, further reduced Medicare payments to several types of providers, including hospitals, imaging centers and cancer treatment centers. Recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries and proposed bills designed to, among other things, reform government program reimbursement methodologies. Additionally, individual states in the United States have also become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

We expect that the ACA, these new laws and other healthcare reform measures that may be adopted in the future may result in additional reductions in Medicare and other healthcare funding, more rigorous coverage criteria, new payment methodologies and additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our product candidates, if approved.

In the EU, similar political, economic and regulatory developments may affect our ability to profitably commercialize our product candidates, if approved. In addition to continuing pressure on prices and cost containment measures, legislative developments at the EU or member state level may result in significant additional requirements or obstacles that may increase our operating costs. The delivery of healthcare in the EU, including the establishment and operation of health services and the pricing and reimbursement of medicines, is almost exclusively a matter for national, rather than EU, law and policy. National governments and health service providers have different priorities and

approaches to the delivery of health care and the pricing and reimbursement of products in that context. In general, however, the healthcare budgetary constraints in most EU member states have resulted in restrictions on the pricing and reimbursement of medicines by relevant health service providers. Coupled with ever-increasing EU and national regulatory burdens on those wishing to develop and market products, this could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to commercialize our product candidates, if approved. In markets outside of the United States and EU, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action in the United States, the EU or any other jurisdiction. 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.

Any product candidates for which we intend to seek approval as biologic products may face competition sooner than anticipated.

The ACA includes a subtitle called the Biologics Price Competition and Innovation Act of 2009 ("BPCIA"), which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until twelve years from the date on which the reference product was first licensed. During this twelve-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of its product. The law is complex and is still being interpreted and implemented by the FDA. Any processes adopted by the FDA to implement the BPCIA could have a material adverse effect on the future commercial prospects for our biological products.

Mupadolimab, which we are evaluating in a Phase 1/1b oncology clinical trial is a biological product. We believe that mupadolimab and any of our future product candidates, if approved as a biological product under a BLA, should qualify for the twelve-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to Congressional action or otherwise, or that the FDA will not consider our product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. Jurisdictions in addition to the United States have established abbreviated pathways for regulatory approval of biological products that are biosimilar to earlier approved reference products. For example, the EU has had an established regulatory pathway for biosimilars since 2006. Moreover, the extent to which a biosimilar, once approved, could be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products will depend on a number of marketplace and regulatory factors that are still developing.

We may fail to obtain orphan drug designations from the FDA for our product candidates, and even if we obtain such designations, we may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity.

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 United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug or biologic will be recovered from sales in the United States. In the United States, 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 or condition 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 or BLA, to market the same drug or biologic for the same disease or condition 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.

While we have not obtained nor have we sought to obtain orphan designation for any product candidate, we believe many of the potential indications of our product candidates, could qualify for orphan drug designation. As a result, we may seek to obtain orphan drug designation for our product candidates in the future. Even if we obtain such designations, we may not be the first to obtain marketing approval of our product candidate for the orphan-designated disease or condition due to the uncertainties associated with developing pharmaceutical products. In addition, exclusive marketing rights in the United States may be limited if we seek approval for a disease or condition broader than the orphan-designated disease or condition 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 can be approved for the same disease or condition. Even after an orphan product is approved, the FDA can subsequently approve the same drug for the same disease or 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, while we may seek orphan drug designation for our product candidates, we may never receive such designations.

We may expend our limited resources to pursue a particular product candidate and fail to capitalize on product candidates that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we focus on specific product candidates, including mupadolimab, CPI-818 and ciforadenant. As a result, we may forgo or delay pursuit of opportunities with other product candidates that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable product candidates. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

We may not be successful in establishing and maintaining development or other strategic collaborations, which could adversely affect our ability to develop and commercialize product candidates.

In connection with our Phase 1/1b clinical trial for ciforadenant, we entered into a clinical trial collaboration agreement with Genentech in October 2015. Pursuant to the agreement, Genentech provides access to, and supplies of, its cancer immunotherapy, Tecentriq, to be used in combination with ciforadenant during the clinical trial. The collaboration operates under a joint development committee with equal representation from both companies. In May 2017, we signed a second clinical trial collaboration agreement with Genentech. Under this second agreement, ciforadenant administered in combination with Tecentriq is being evaluated in a Phase 1b/2 randomized, controlled clinical study as second-line therapy in patients with non-small cell lung cancer who are resistant and/or refractory to prior therapy with an anti-PD-(L)1 antibody. However, we and Genentech each have the right to terminate the respective collaboration agreements due to material breach by either party, for safety considerations, if directed by a regulatory authority or if development of ciforadenant or Tecentriq is discontinued. If we fail to maintain these strategic collaborations with Genentech (1) the development of ciforadenant in combination with Tecentriq may be terminated or delayed; (2) our cash expenditures related to development of ciforadenant could increase significantly, and we may need to seek additional financing; (3) we may be required to hire additional employees or otherwise develop expertise for which we have not budgeted; (4) we will bear all of the risk related to the development of ciforadenant as a combination therapy; and (5) we will need to seek collaborations with other companies that have anti-PD-1 or anti-PD-L1 antibodies, which will significantly delay our development program and could have a material adverse effect on our business, financial condition and results of operations.

We may form strategic alliances and collaborative partnerships in the future, and we may not realize the benefits of such alliances.

In addition to our collaboration agreements with Genentech, we may form additional strategic alliances, create joint ventures or collaborations or enter into licensing arrangements with third parties that we believe will complement or augment our existing business, including for the continued development or commercialization of our product candidates. These relationships may result in or include non-recurring and other charges, increased near- and long-term expenditures, the issuance of securities that dilute our existing stockholders or disruptions to our management and business. In addition, we face significant competition in seeking appropriate strategic partners, and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for our product candidates because third parties may view the risk of failure in future clinical trials as too significant or the commercial opportunity for our product candidates as too limited. We cannot be certain that, following a strategic transaction or license, we will achieve the revenue or specific net income that justifies such transaction.

Even if we are successful in our efforts to establish strategic alliances or collaborative partnerships, the terms that we agree upon may not be favorable to us, and we may not be able to maintain such strategic alliances or collaborative partnerships if, for example, development or approval of a product candidate is delayed, the safety of a product candidate is questioned or sales of an approved product candidate are unsatisfactory. In addition, any existing or potential future strategic alliances or collaborative partnerships may be terminable by our strategic partners, and we may not be able to adequately protect our rights under these agreements. Furthermore, strategic partners may negotiate for certain rights to control decisions regarding the development and commercialization of our product candidates, if approved, and may not conduct those activities in the same manner as we do. Any termination of strategic alliances or collaborative partnerships we enter into in the future, or any delay in entering into collaborative partnership agreements related to our product candidates, could delay the development and commercialization of our product candidates and reduce their competitiveness if they reach the market, which could have a material adverse effect on our business, financial condition and results of operations.

In October 2020, we formed Angel Pharmaceuticals with a group of investors in China to create a new Chinabased biopharmaceutical company with a mission to bring innovative quality medicines to Chinese patients for treatment of serious diseases including cancer, autoimmune diseases and infectious diseases. We granted Angel Pharmaceuticals a license to rights to develop and commercialize our three clinical-stage candidates – mupadolimab, CPI-818 and ciforadenant – in greater China and obtained global rights to our BTK inhibitor preclinical programs. While certain of our executive officers and directors will initially be on the board of directors of Angel Pharmaceuticals, we have limited control over it and so we will be subject to many of the same risks set forth above with respect to all collaborations. Additionally, any actions taken by the Chinese government to implement trade policy changes, financial restrictions, or increased regulatory scrutiny on U.S. companies could negatively impact Angel Pharmaceuticals. For instance, China has previously taken or threatened to take trade and other actions in retaliation against U.S. policies, and is likely to continue to do so. Past or future developments in this regard may have a material adverse effect on the economies, financial markets, and currency exchange rates in China and the United States. Tensions between the United States and China have increased over the past few years as a result of disputes in areas including trade policy, intellectual property, cybersecurity and data privacy, as well as due to geopolitical conflicts such as the war between Ukraine and Russia. Our interests in Angel Pharmaceuticals could be harmed if relations between the United States and China worsen or if either government imposes additional policies, tariffs or sanctions and our business could encounter increased regulatory scrutiny in China, as well as adverse media or public attention in China, as a result of the deteriorating bilateral relationship

Angel Pharmaceuticals will also be subject to many of the same risks that are set forth in this "Risk Factors" section pertaining to operations, government regulation, and intellectual property, which may adversely affect Angel Pharmaceuticals' ability to develop and commercialize products.

We face competition from entities that have developed or may develop product candidates for cancer, including companies developing novel treatments and technology platforms. If these companies develop technologies or product candidates more rapidly than we do or their technologies are more effective, our ability to develop and successfully commercialize product candidates may be adversely affected.

Our competitors have developed, are developing or will develop product candidates and processes competitive with our product candidates. Competitive therapeutic treatments include those that have already been approved and accepted by the medical community and any new treatments that enter the market. We believe that a significant number of products are currently under development, and may become commercially available in the future, for the treatment of conditions for which we may attempt to develop product candidates. In particular, there is intense and rapidly evolving competition in the immunoregulatory therapeutics field. Our competitors include larger and better funded pharmaceutical, biopharmaceutical, biotechnological and therapeutics companies. Moreover, we also compete with universities and other research institutions that may be active in oncology research and could be in direct competition with us. We also compete with these organizations to recruit management, scientists and clinical development personnel, which could negatively affect our level of expertise and our ability to execute our business plan. We will also face competition in establishing clinical trial sites, registering subjects for clinical trials and in identifying and in-licensing new product candidates. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

Kyowa Hakko Kirin has approval in Japan and the US for istradefylline, an A2A antagonist, in Parkinson's disease. Within oncology, Novartis has announced an exclusive licensing agreement with Palobiofarma SL and is conducting a Phase 1 trial with an A2A antagonist. AstraZeneca plc is conducting clinical trials with an A2A antagonist for use in cancer therapy. Merck KgaA has entered into a pre-clinical collaboration with Domain Therapeutics Inc. to develop programs targeting the adenosine pathway. In addition, Redoxtherapies, Inc., which was acquired by Juno Therapeutics and subsequently by Celgene, and Arcus Biosciences, Inc. are developing A2A receptor antagonists for cancer. Astra Zeneca, Bristol-Myers Squib, and Novartis in partnership with Surface Oncology, Inc. have initiated clinical trials with anti-CD73 antibodies in cancer patients. Recently, Astra Zeneca reported positive results in a phase 2 clinical trial in Stage 3 NSCLC with the combination of durvalumab and their anti CD73 antibody, oleclumab. More generally, in the field of immuno-oncology, there are large pharmaceutical companies with approved products or products in late-stage development that target other immune checkpoints, including PD-1, PD-L1 or CTLA-4. These companies include Bristol-Myers Squibb (nivolumab, ipilimumab), Merck (pembrolizumab), Genentech (atezolizumab) and AstraZeneca (durvalumab, tremelimumab).

Many of our competitors have significantly greater financial, technical, manufacturing, marketing, sales and supply resources or experience than we do. If we successfully obtain approval for any product candidate, we will face competition based on many different factors, including the safety and effectiveness of our products, the ease with which our products can be administered and the extent to which patients accept relatively new routes of administration, the timing and scope of regulatory approvals for these products, the availability and cost of manufacturing, marketing and sales capabilities, price, reimbursement coverage and patent position. Competing products could present superior treatment alternatives, including by being more effective, safer, less expensive or marketed and sold more effectively than any products we may develop. Competitive products may make any products we develop obsolete or noncompetitive before we recover the expense of developing and commercializing our product candidates.

The market opportunities for our product candidates may be limited to those patients who are ineligible for or have failed prior treatments and may be small.

Cancer therapies are sometimes characterized as first-line, second-line or third-line, and the FDA often approves new therapies initially only for third-line use. When cancer is detected early enough, first line therapy is sometimes adequate to cure the cancer or prolong life without a cure. Whenever first-line therapy, usually chemotherapy, hormone therapy, surgery or a combination of these, proves unsuccessful, second-line therapy may be administered. Second-line therapies often consist of more chemotherapy, radiation, antibody drugs, tumor targeted small molecules or a combination of these. Third-line therapies can include bone marrow transplantation, antibody and small molecule targeted therapies, more invasive forms of surgery and new technologies. In markets with approved therapies, we expect to initially seek approval of our product candidates as a later stage therapy for patients who have failed other approved

treatments. Subsequently, for those drugs that prove to be sufficiently beneficial, if any, we would expect to seek approval as a second-line therapy and potentially as a first-line therapy, but there is no guarantee that our product candidates, even if approved, would be approved for second-line or first-line therapy. In addition, we may have to conduct additional clinical trials prior to gaining approval for second-line or first-line therapy.

Our projections of both the number of people who have the cancers we are targeting, as well as the subset of people with these cancers in a position to receive later stage therapy and who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations or market research and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these cancers. The number of patients may turn out to be lower than expected. In addition, the potentially addressable patient population for our product candidates may be limited or may not be amenable to treatment with our product candidates. Even if we obtain significant market share for our product candidates, we may never achieve profitability without obtaining regulatory approval for additional indications, including use as a first or second-line therapy.

We have no sales, marketing or distribution capabilities, and we may have to invest significant resources to develop these capabilities.

We have no internal sales, marketing or distribution capabilities. If mupadolimab, CPI-818 and ciforadenant or any of our other product candidates ultimately receives regulatory approval, we may not be able to effectively market and distribute the product candidate. We may have to seek collaborators or invest significant amounts of financial and management resources to develop internal sales, distribution and marketing capabilities, some of which will be committed prior to any confirmation that mupadolimab, CPI-818 and ciforadenant or any of our other product candidates will be approved, if at all. We may not be able to enter into collaborations or hire consultants or external service providers to assist us in sales, marketing and distribution functions on acceptable financial terms or at all. Even if we determine to perform sales, marketing and distribution functions ourselves, we could face a number of additional related risks, including:

- we may not be able to attract and build an effective marketing department or sales force;
- the cost of establishing a marketing department or sales force may exceed our available financial resources
 and the revenue generated by mupadolimab, CPI-818 and ciforadenant or any other product candidates that
 we may develop, in-license or acquire; and
- our direct sales and marketing efforts may not be successful.

Governments may impose price controls, which may adversely affect our future profitability.

We intend to seek approval to market our product candidates in both the United States and in foreign jurisdictions. In some foreign countries, particularly in the EU, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product candidate. To obtain reimbursement or pricing approval in some countries, we may be required to conduct clinical trials to compare the cost-effectiveness of our product candidates to other available therapies, which is time-consuming and costly. If reimbursement of our future products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, we may be unable to achieve or sustain profitability.

Risks Related to Our Business Operations

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any quidance we may provide.

Our quarterly and annual operating results may fluctuate significantly, which makes it difficult for us to predict our future operating results. These fluctuations may occur due to a variety of factors, many of which are outside of our control, including, but not limited to:

- the timing and cost of, and level of investment in, research, development and commercialization activities
 relating to our product candidates, which may change from time to time;
- coverage and reimbursement policies with respect to our product candidates, if approved, and potential future drugs that compete with our product candidates;
- the cost of manufacturing our product candidates, which may vary depending on the quantity of production and the terms of our agreements with manufacturers;
- expenditures that we may incur to acquire, develop or commercialize additional product candidates and technologies;
- the level of demand for any approved products, which may vary significantly;
- future accounting pronouncements or changes in our accounting policies; and
- the timing and success or failure of clinical trials for our product candidates or competing product candidates, or any other change in the competitive landscape of our industry, including consolidation among our competitors or partners.

The cumulative effects of these factors could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance.

This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated revenue or earnings guidance we may provide.

We are dependent on the services of our President and Chief Executive Officer, Richard A. Miller, M.D., and other key executives, and if we are not able to retain these members of our management or recruit additional management, clinical and scientific personnel, our business will suffer.

We are dependent on the principal members of our management and scientific staff. The loss of service of any of our management could harm our business. In addition, we are dependent on our continued ability to attract, retain and motivate highly qualified management, clinical and scientific personnel. If we are not able to retain our management, particularly our President and Chief Executive Officer, Dr. Miller, and to attract, on acceptable terms, additional qualified personnel necessary for the continued development of our business, we may not be able to sustain our operations or grow. Although we have executed employment agreements with each member of our current executive management team, including Dr. Miller, these agreements are terminable at will with or without notice and, therefore, we may not be able to retain their services as expected.

We will need to expand and effectively manage our managerial, operational, financial and other resources in order to successfully pursue our clinical development and commercialization efforts. We may not be able to attract or retain qualified management and scientific and clinical personnel in the future due to the intense competition for qualified personnel among pharmaceutical, biotechnology and other businesses, particularly in the San Francisco Bay Area. Our industry has experienced a high rate of turnover of management personnel in recent years. If we are not able to attract, integrate, retain and motivate necessary personnel to accomplish our business objectives, we may experience constraints that will significantly impede the achievement of our development objectives, our ability to raise additional capital and our ability to implement our business strategy.

In addition, we do not currently maintain "key person" life insurance on the lives of our executives or any of our employees. This lack of insurance means that we may not have adequate compensation for the loss of the services of these individuals.

We may encounter difficulties in managing our growth and expanding our operations successfully.

We will need to grow our organization substantially to continue development and pursue the potential commercialization of mupadolimab, CPI-818 and ciforadenant and our other product candidates. As we seek to advance mupadolimab, CPI-818 and ciforadenant and other product candidates, we will need to expand our financial, development, regulatory, manufacturing, marketing and sales capabilities or contract with third parties to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with various strategic partners, suppliers and other third parties. Our future financial performance and our ability to commercialize our product candidates and to compete effectively will depend, in part, on our ability to manage any future growth effectively.

We are subject to various federal and state healthcare laws and regulations, and our failure to comply with these laws and regulations could harm our results of operations and financial condition.

Although we do not currently have any products on the market, if we obtain FDA or foreign approval for any of our product candidates and begin commercializing those products in the United States or abroad, our operations may be directly, or indirectly through our customers and third-party payors, subject to various U.S. federal, state and foreign healthcare laws and regulations. These laws will affect our operations, sales and marketing practices, and our relationships with physicians and other customers and third-party payors. Such laws include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the federal Anti-Kickback Statute or specific intent to violate it to have committed a violation;
- the federal False Claims Act, which imposes criminal and civil penalties, including through civil
 whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be
 presented, to the federal government, claims for payment that are false or fraudulent or making a false
 statement to avoid, decrease or conceal an obligation to pay money to the federal government; in addition,
 the government may assert that a claim including items or services resulting from a violation of the federal
 Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act;
- the federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), which imposes criminal
 and civil liability for executing a scheme to defraud any healthcare benefit program or making false
 statements relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity does
 not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation;

- the federal Physician Payment Sunshine Act, which requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to the government information related to payments or other "transfers of value" made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain non-physician practitioners (physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, anesthesiology assistants and certified nurse midwives) and teaching hospitals, and requires applicable manufacturers and group purchasing organizations to report annually to the government ownership and investment interests held by the physicians described above and their immediate family members. Manufacturers are required to submit reports to the government by the 90th day of each calendar year; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which
 may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed
 by non-governmental third-party payors, including private insurers; state laws that require pharmaceutical
 companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant
 compliance guidance promulgated by the federal government; and state laws that require drug manufacturers
 to report information related to payments and other transfers of value to physicians and other healthcare
 providers or marketing expenditures and pricing information.

Ensuring that our internal operations and business arrangements with third-parties comply with applicable healthcare laws and regulations could involve substantial costs. If our operations are found to be in violation of such laws or any other governmental laws and regulations that may apply to us, we may be subject to significant penalties, including civil, criminal and administrative penalties, damages, fines, exclusion from U.S. government funded healthcare programs, such as Medicare and Medicaid, disgorgement, individual imprisonment, contractual damages, reputational harm, diminished profits and the curtailment or restructuring of our operations.

We and our current and any existing or future collaborators, third-party manufacturers and suppliers will or may use biological materials and may use hazardous materials, and any claims relating to improper handling, storage or disposal of these materials could be time consuming or costly.

We and our current and any existing or future collaborators, third-party manufacturers or suppliers will or may use biological materials and may use hazardous materials, including chemicals and biological agents and compounds that could be dangerous to human health and safety of the environment. Our operations and the operations of our third-party manufacturers and suppliers also produce hazardous waste products. Federal, state and local laws and regulations govern the use, generation, manufacture, storage, handling and disposal of these materials and wastes. Compliance with applicable environmental laws and regulations may be expensive, and current or future environmental laws and regulations may impair our product development efforts. In addition, we cannot eliminate the risk of accidental injury or contamination from these materials or wastes. We do not carry specific biological or hazardous waste insurance coverage, and our property, casualty and general liability insurance policies specifically exclude coverage for damages and fines arising from biological or hazardous waste exposure or contamination. In the event of contamination or injury, we could be held liable for damages or be penalized with fines in an amount exceeding our resources, and our clinical trials or regulatory approvals could be suspended.

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of mupadolimab, CPI-818 and ciforadenant or our other product candidates.

We face an inherent risk of product liability as a result of the clinical testing of mupadolimab, CPI-818 and ciforadenant, and the planned clinical testing of our other product candidates and will face an even greater risk if we commercialize our product candidates. For example, we may be sued if mupadolimab, CPI-818 and ciforadenant or our other product candidates allegedly cause injury or are found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product candidate, negligence, strict liability and a breach of warranties. Claims could also be asserted under state consumer protection acts.

If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit or cease the commercialization of our product candidates. Even a successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for mupadolimab, CPI-818 and ciforadenant or our other product candidates;
- injury to our reputation;
- withdrawal of clinical trial participants;
- costs to defend the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- the inability to commercialize mupadolimab, CPI-818 and ciforadenant or our other product candidates; and
- a decline in our stock price.

We have product liability insurance coverage in an amount and on terms and conditions that are customary for similarly situated companies and that are satisfactory to our board of directors. Our inability to retain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of mupadolimab, CPI-818 and ciforadenant or our other product candidates. Although we plan to maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies will also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We may have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts.

We and any of our existing or potential future collaborators will be required to report to regulatory authorities if any products that may be approved in the future cause or contribute to adverse medical events, and any failure to do so would result in sanctions that would materially harm our business.

If we and any of our existing or potential future collaborators are successful in commercializing our products, the FDA and foreign regulatory authorities would require that we and any of our existing or potential future collaborators report certain information about adverse medical events if those products may have caused or contributed to those adverse events. The timing of our obligation to report would be triggered by the date we become aware of the adverse event as well as the nature of the event. We and any of our existing or potential future collaborators or CROs may fail to report adverse events within the prescribed timeframe. If we or any of our existing or potential future collaborators or CROs fail to comply with such reporting obligations, the FDA or a foreign regulatory authority could take action, including criminal prosecution, the imposition of civil monetary penalties, seizure of our products or delay in approval or clearance of future products.

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

We are exposed to the risk that our employees, independent contractors, principal investigators, CROs, consultants and vendors may engage in misconduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct involving the improper use or misrepresentation of information obtained in the course of clinical trials, the creation of 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. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity 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. In addition, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. 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 fines and other sanctions.

Risks Related to Our Intellectual Property

Our rights to develop and commercialize our product candidates are subject in part to the terms and conditions of licenses granted to us by other companies. The patent protection, prosecution and enforcement for some of our product candidates may be dependent on third parties.

We currently are heavily reliant upon licenses of certain patent rights and proprietary technology from third parties that is important or necessary to the development of our technology and products, including technology related to our product candidates. For example, we rely on our license agreement with Vernalis for rights with respect to the intellectual property covering ciforadenant and certain development candidates under our A2B receptor antagonist program. Further, we rely on our license agreement with The Scripps Research Institute for rights related to our lead development candidate for our anti-CD73 program, mupadolimab. These and other licenses we may enter into in the future may not provide adequate rights to use such intellectual property and technology in all relevant fields of use or in all territories in which we may wish to develop or commercialize our technology and products in the future. As a result, we may not be able to develop and commercialize our technology and products in fields of use and territories for which we are not granted rights pursuant to such licenses.

Licenses to additional third-party technology that may be required for our development programs may not be available in the future or may not be available on commercially reasonable terms, which could have a material adverse effect on our business and financial condition.

In some circumstances, we may not have the right to control the preparation, filing, prosecution and enforcement of patent applications, or to maintain the patents, covering technology that we license from third parties. In addition, some of our agreements with our licensors require us to obtain consent from the licensor before we can enforce patent rights, and our licensor may withhold such consent or may not provide it on a timely basis. Therefore, we cannot be certain that our licensors or collaborators will prosecute, maintain, enforce and defend such intellectual property rights in a manner consistent with the best interests of our business, including by taking reasonable measures to protect the confidentiality of know-how and trade secrets, or by paying all applicable prosecution and maintenance fees related to intellectual property registrations for any of our product candidates. We also cannot be certain that our licensors have drafted or prosecuted the patents and patent applications licensed to us in compliance with applicable laws and regulations, which may affect the validity and enforceability of such patents or any patents that may issue from such applications. If they fail to do so, this could cause us to lose rights in any applicable intellectual property that we in-license, and as a result our ability to develop and commercialize products or product candidates may be adversely affected and we may be unable to prevent competitors from making, using and selling competing products.

Our success depends on our ability to protect our intellectual property and our proprietary technologies.

Our commercial success depends in part on our ability to obtain and maintain patent protection and trade secret protection for our product candidates, proprietary technologies and their uses as well as our ability to operate without infringing upon the proprietary rights of others. We generally seek to protect our proprietary position by filing patent applications in the United States and abroad related to our product candidates, proprietary technologies and their uses that are important to our business. There can be no assurance that our patent applications or those of our licensors will result in additional patents being issued or that issued patents will afford sufficient protection against competitors with similar technology, nor can there be any assurance that the patents issued will not be infringed, designed around or invalidated by third parties. Even issued patents may later be found invalid or unenforceable or may be modified or revoked in proceedings instituted by third parties before various patent offices or in courts. The degree of future protection for our proprietary rights is uncertain. Only limited protection may be available and may not adequately protect our rights or permit us to gain or keep any competitive advantage. This failure to properly protect the intellectual property rights relating to our product candidates could have a material adverse effect on our financial condition and results of operations.

While we have rights to an issued composition-of-matter patent in the United States and corresponding issued patents in certain foreign territories covering ciforadenant, we cannot be certain that the claims in any of our patent applications covering composition-of-matter of our other product candidates will be considered patentable by the United States Patent and Trademark Office ("USPTO"), courts in the United States or by the patent offices and courts in foreign countries, nor can we be certain that the claims in our issued composition-of-matter patents will not be found invalid or unenforceable if challenged.

The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that we or any of our existing or potential future collaborators will be successful in protecting our product candidates by obtaining and defending patents. These risks and uncertainties include the following:

- the USPTO and various foreign governmental patent agencies require compliance with a number of
 procedural, documentary, fee payment and other provisions during the patent process, the noncompliance
 with which can result in abandonment or lapse of a patent or patent application, and partial or complete loss
 of patent rights in the relevant jurisdiction;
- patent applications may not result in any patents being issued;
- patents that may be issued or in-licensed may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable or otherwise may not provide any competitive advantage;
- our competitors, many of whom have substantially greater resources than we do and many of whom have
 made significant investments in competing technologies, may seek or may have already obtained patents that
 will limit, interfere with or eliminate our ability to make, use and sell our potential product candidates;
- there may be significant pressure on the U.S. government and international governmental bodies to limit the scope of patent protection both inside and outside the United States for disease treatments that prove successful, as a matter of public policy regarding worldwide health concerns; and
- countries other than the United States may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop and market competing product candidates.

The patent prosecution process is also expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Although we enter into non-disclosure and confidentiality agreements with parties who have access to

patentable aspects of our research and development output, such as our employees, corporate collaborators, outside scientific collaborators, CROs, contract manufacturers, consultants, advisors and other third parties, any of these parties may breach such agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents, if issued, or the patent rights that we license from others, may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, which could limit our ability to stop others from using or commercializing similar or identical products, or limit the duration of the patent protection of our products and product candidates. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our intellectual property may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

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

In addition, we rely on the protection of our trade secrets, including unpatented know-how, technology and other proprietary information to maintain our competitive position. Although we have taken steps to protect our trade secrets and unpatented know-how, including entering into confidentiality agreements with third parties, and confidential information and inventions agreements with employees, consultants and advisors. Despite these efforts, we cannot provide any assurances that all such agreements have been duly executed, and any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. Moreover, third parties may still obtain this information or may come upon this or similar information independently, and we would have no right to prevent them from using that technology or information to compete with us. If any of these events occurs or if we otherwise lose protection for our trade secrets, the value of this information may be greatly reduced and our competitive position would be harmed. If we do not apply for patent protection prior to such publication or if we cannot otherwise maintain the confidentiality of our proprietary technology and other confidential information, then our ability to obtain patent protection or to protect our trade secret information may be jeopardized.

Our commercial success depends significantly on our ability to operate without infringing the patents and other proprietary rights of third parties. Claims by third parties that we infringe their proprietary rights may result in liability for damages or prevent or delay our developmental and commercialization efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. Other entities may have or obtain patents or proprietary rights that could limit our ability to make, use, sell, offer for sale or import our product candidates and future approved products or impair our competitive position. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions, reexaminations, inter partes review ("IPR") proceedings and post-grant review ("PGR") proceedings before the USPTO and/or corresponding foreign patent offices. Numerous third-party U.S. and foreign issued patents and pending patent applications exist in the fields in which we are developing product candidates. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. For example, we are aware of an issued patent in Australia that may be relevant to commercialization of ciforadenant in that country. That Australian patent is expected to expire in 2022. Our ability to commercialize ciforadenant in Australia prior to 2022 could be adversely affected if we do not obtain a license under such patent. We are also aware of a corresponding patent application that has been issued in the United States and which is expected to expire in 2023. However, to the extent that any claims of this patent may be interpreted to cover our potential uses of ciforadenant, we do not believe that such claims would be valid and enforceable if asserted. We have filed a PGR petition challenging the patentability of certain claims of the patent and the

patentee subsequently disclaimed every challenged claim. As the biotechnology industry expands and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the patent rights of third parties. Because patent applications are maintained as confidential for a certain period of time, until the relevant application is published we may be unaware of third-party patent applications that, if issued as patents, may be infringed by commercialization of mupadolimab, CPI-818 and ciforadenant or our other product candidates, and cannot be certain that we were the first to file a patent application related to a product candidate or technology. Moreover, because patent applications can take many years to issue, there may be currently-pending patent applications that may later result in issued patents that our product candidates may infringe. In addition, identification of third-party patent rights that may be relevant to our technology is difficult because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims. Any claims of patent infringement asserted by third parties would be time consuming and could:

- result in costly litigation;
- divert the time and attention of our technical personnel and management;
- cause development delays;
- prevent us from commercializing mupadolimab, CPI-818 and ciforadenant or our other product candidates until the asserted patent expires or is held finally invalid or not infringed in a court of law;
- require us to develop non-infringing technology, which may not be possible on a cost-effective basis; or
- require us to enter into royalty or licensing agreements, which may not be available on commercially reasonable terms, or at all.

Although no third party has asserted a claim of patent infringement against us as of the date of this report, others may hold proprietary rights that could prevent mupadolimab, CPI-818 and ciforadenant or our other product candidates from being marketed. Any patent-related legal action against us claiming damages and seeking to enjoin commercial activities relating to our product candidates or processes could subject us to potential liability for damages, including treble damages if we were determined to willfully infringe, and require us to obtain a license to manufacture or market mupadolimab, CPI-818 and ciforadenant or our other product candidates.

Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. We cannot predict whether we would prevail in any such actions or that any license required under any of these patents would be made available on commercially acceptable terms, if at all. Moreover, even if we or our future strategic partners were able to obtain a license, the rights may be nonexclusive, which could result in our competitors gaining access to the same intellectual property. In addition, we cannot be certain that we could redesign our product candidates or processes to avoid infringement, if necessary. Accordingly, an adverse determination in a judicial or administrative proceeding, or the failure to obtain necessary licenses, could prevent us from developing and commercializing mupadolimab, CPI-818 and ciforadenant or our other product candidates, which could harm our business, financial condition and operating results. In addition, intellectual property litigation, regardless of its outcome, may cause negative publicity and could prohibit us from marketing or otherwise commercializing our product candidates and technology.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time consuming, and unsuccessful. Further, our issued patents could be found invalid or unenforceable if challenged in court.

Competitors may infringe our intellectual property rights or those of our licensors. To prevent infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in a patent infringement proceeding, a court may decide that a patent we own or in-license is not valid, is unenforceable and/or is not infringed. If we or any of our existing or potential future collaborators were to initiate legal

proceedings against a third party to enforce a patent directed at one of our product candidates, the defendant could counterclaim that our patent is invalid and/or unenforceable in whole or in part. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge include an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could include an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO or made a misleading statement during prosecution. Third parties may also raise similar claims before the USPTO, even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable, and prior art could render our patents or those of our licensors invalid. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on such product candidate. Such a loss of patent protection would have a material adverse impact on our business.

Interference proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our licensors. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Our defense of litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third parties or enter into development or manufacturing partnerships that would help us bring our product candidates to market.

Even if resolved in our favor, litigation or other legal proceedings relating to our intellectual property rights may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.

On September 16, 2011, the Leahy-Smith America Invents Act ("Leahy-Smith Act") was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. In particular, under the Leahy-Smith Act, the United States transitioned in March 2013 to a "first to file" system in which the first inventor to file a patent application will be entitled to the patent. Third parties are allowed to submit prior art before the issuance of a patent by the USPTO, and may become involved in post-grant proceedings including opposition, derivation, reexamination, inter-partes review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope or enforceability of, or invalidate, our patent rights, which could adversely affect our competitive position.

We may not be successful in obtaining or maintaining necessary rights to our product candidates through acquisitions and in-licenses.

We currently have rights to the intellectual property, through licenses from third parties and under patents that we own, to develop our product candidates. Because our programs may require the use of proprietary rights held by third parties, the growth of our business will depend in part on our ability to acquire, in-license or use these proprietary rights. For example, our product candidates may require specific formulations to work effectively and efficiently and the rights to these formulations may be held by others. We may be unable to acquire or in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that we identify as necessary for our product candidates. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire third-party intellectual property rights that we may consider attractive. These established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment.

We have collaborated with U.S. academic institutions and may in the future collaborate with U.S. and foreign academic institutions to accelerate our preclinical research or development under written agreements with these institutions. These institutions may provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such option, we may be unable to negotiate a license within the specified timeframe or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our program.

If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may have to abandon development of that program and our business and financial condition could suffer.

We may fail to comply with any of our obligations under existing agreements pursuant to which we license or have otherwise acquired intellectual property rights or technology, which could result in the loss of rights or technology that are material to our business.

Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues. We are party to various agreements that we depend on for rights to use various technologies that are material to our business, including intellectual property rights covering ciforadenant and methods relating to its use and manufacture. In each of these cases, our rights to use the licensed intellectual property are subject to the continuation of and our compliance with the terms of these agreements. Disputes may arise regarding our rights to intellectual property licensed to us from a third party, including but not limited to:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the ownership of inventions and know-how resulting from the creation or use of intellectual property by us, alone or with our licensors and collaborators;
- the scope and duration of our payment obligations;

- our rights upon termination of such agreement; and
- the scope and duration of exclusivity obligations of each party to the agreement.

If disputes over intellectual property and other rights that we have licensed or acquired from third parties prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates. If we fail to comply with our obligations under current or future licensing agreements, these agreements may be terminated or the scope of our rights under them may be reduced and we might be unable to develop, manufacture or market any product that is licensed under these agreements.

We may be subject to claims that we have wrongfully hired an employee from a competitor or that we or our employees have wrongfully used or disclosed alleged confidential information or trade secrets of their former employers.

As is common in the pharmaceutical industry, in addition to our employees, we engage the services of consultants to assist us in the development of our product candidates. Many of these consultants, and many of our employees, were previously employed at, or may have previously provided or may be currently providing consulting services to, other pharmaceutical companies including our competitors or potential competitors. We may become subject to claims that we, our employees or a consultant inadvertently or otherwise used or disclosed trade secrets or other information proprietary to their former employers or their former or current clients. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, which could adversely affect our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to our management team.

We may be subject to claims challenging the inventorship or ownership of our patents and other intellectual property.

We may also be subject to claims that former employees, collaborators or other third parties have an ownership interest in our patents or other intellectual property. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and distraction to management and other employees.

If we do not obtain patent term extension for our product candidates, our business may be materially harmed.

Depending upon the timing, duration and specifics of potential FDA marketing approval of ciforadenant, mupadolimab, CPI-818 or other product candidates, one or more of our U.S. patents may be eligible for limited patent term restoration under the Drug Price Competition and Patent Term Restoration Act of 1984 ("Hatch-Waxman Amendments"). The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, we may not be granted an extension because of, for example, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or restoration or the term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our revenue could be reduced, possibly materially.

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

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our

ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our financial condition or results of operations.

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

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve a high degree of technological and legal complexity. Therefore, obtaining and enforcing biopharmaceutical patents is costly, time consuming and inherently uncertain. In addition, Congress may pass patent reform legislation that is unfavorable to us. The Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents we might obtain in the future.

We may not be able to protect our intellectual property rights throughout the world.

While we have issued patents directed at ciforadenant in the United States and certain foreign territories, and pending patent applications directed at mupadolimab, CPI-818, ciforadenant and other product candidates in the United States and other countries, filing, prosecuting and defending patents on mupadolimab, CPI-818, ciforadenant and our other product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection but enforcement is not as strong as that in the United States. These products may compete with our product candidates, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

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

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

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

- others may be able to make adenosine antagonists that are similar to our product candidates but that are not
 covered by the claims of the patents that we own or have exclusively licensed;
- we or our licensors or future collaborators might not have been the first to make the inventions covered by the issued patent or pending patent application that we own or have exclusively licensed;
- we or our licensors or future collaborators might not have been the first to file patent applications covering certain of our inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we own or have exclusively licensed may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- our competitors might conduct research and development activities in countries where we do not have patent
 rights and then use the information learned from such activities to develop competitive products for sale in
 our major commercial markets;
- we may not develop additional proprietary technologies that are patentable; and
- the patents of others may have an adverse effect on our business.

Should any of these events occur, they could significantly harm our business, results of operations and prospects.

Risks Related to Our Common Stock

An active, liquid and orderly market for our common stock may not be sustained.

Although our common stock is listed on The Nasdaq Global Market ("Nasdaq"), an active trading market for our common stock may not be sustained on Nasdaq or any other exchange in the future. The lack of an active market may impair our stockholders' ability to sell their shares at the time they wish to sell them or at a price that they consider reasonable. If an active market for our common stock is not sustained, it may also be difficult for our stockholders to sell shares without depressing the market price for the shares or at all. An inactive market may also impair our ability to raise capital by selling shares and may impair our ability to acquire other businesses, applications or technologies using our shares as consideration, which, in turn, could materially adversely affect our business. In any event, we have a limited public float and, as a result, our common stock has been and will likely continue to be less liquid than many other listed companies and trading may be adversely affected.

The trading price of the shares of our common stock could be highly volatile, and investors in our common stock could incur substantial losses.

Our stock price has been volatile. The stock market in general and the market for stock of pharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance

of particular companies. The market price for our common stock may be influenced by those factors discussed in this "Risk Factors" section and many others, including:

- our ability to enroll subjects in our planned clinical trials;
- results of the clinical trials, and the results of trials of our competitors or those of other companies in our market sector:
- regulatory approval of mupadolimab, CPI-818, ciforadenant and our other product candidates, or limitations
 to specific label indications or patient populations for its use, or changes or delays in the regulatory review
 process;
- Angel Pharmaceuticals' ability to develop and commercialize product candidates in China;
- regulatory developments in the United States and foreign countries; including changes in the policies of the U.S. or Chinese governments resulting in sanctions instituted by either government;
- changes in the structure of healthcare payment systems, especially in light of current reforms to the U.S. healthcare system;
- the success or failure of our efforts to acquire, license or develop additional product candidates;
- innovations or new products developed by us or our competitors;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- manufacturing, supply or distribution delays or shortages;
- any changes to our relationship with any manufacturers, suppliers, collaborators or other strategic partners;
- achievement of product sales and profitability;
- variations in our financial results or those of companies that are perceived to be similar to us;
- market conditions in the pharmaceutical sector and issuance of securities analysts' reports or recommendations;
- the impact of political instability, natural disasters, war and/or events of terrorism, such as the military conflict between Ukraine and Russia, and the corresponding tensions created from such conflict between Russia, the United States and countries in Europe as well as other countries such as China;
- trading volume of our common stock;
- an inability to obtain additional funding;
- sales of our stock by insiders and stockholders;
- general economic, industry and market conditions other events or factors, many of which are beyond our control, including recession or depression resulting from the current COVID-19 pandemic;
- additions or departures of key personnel; and

• intellectual property, product liability or other litigation against us.

As a result of this volatility, investors may experience losses on their investment in our common stock.

In addition, in the past, stockholders have initiated class action lawsuits against pharmaceutical companies following periods of volatility in the market prices of these companies' stock. Such litigation, if instituted against us, could cause us to incur substantial costs and divert management's attention and resources, which could have a material adverse effect on our business, financial condition and results of operations.

Our failure to meet the continued listing requirements of Nasdaq could result in a delisting of our common stock.

If we fail to satisfy the continued listing requirements of Nasdaq, such as the corporate governance requirements or the minimum closing bid price requirement, Nasdaq may take steps to delist our common stock. Such a delisting would likely have a negative effect on the price of our common stock and would impair our stockholders' ability to sell or purchase our common stock when they wish to do so. In the event of a delisting, we can provide no assurance that any action taken by us to restore compliance with listing requirements would allow our common stock to become listed again, stabilize the market price or improve the liquidity of our common stock, prevent our common stock from dropping below the Nasdaq minimum bid price requirement or prevent future non-compliance with Nasdaq's listing requirements.

Because a small number of our existing stockholders own a majority of our voting stock, a stockholder's ability to influence corporate matters will be limited.

As of March 31, 2022, our executive officers, directors and greater than 5% stockholders, in the aggregate, owned approximately 39% of our outstanding common stock. As a result, such persons, acting together, have the ability to control our management and affairs and substantially all matters submitted to our stockholders for approval, including the election and removal of directors and approval of any significant transaction. This concentration of ownership may have the effect of delaying, deferring or preventing a change in control, impeding a merger, consolidation, takeover or other business combination involving us, or discouraging a potential acquiror from making a tender offer or otherwise attempting to obtain control of our business, even if such a transaction would benefit other stockholders.

We do not currently intend to pay dividends on our common stock, and, consequently, our stockholders' ability to achieve a return on their investment will depend on appreciation, if any, in the price of our common stock.

We have never declared or paid any cash dividend on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which stockholders have purchased their shares.

To the extent that we raise additional capital by issuing equity securities, the share ownership of existing stockholders will be diluted. For example, on April 3, 2017, we filed a Registration Statement on Form S-3 (File No. 333-217102), covering the offering of up to \$250 million of shares of common stock, preferred stock, warrants and units. In March 2018, we sold 8,117,647 shares of our common stock for net proceeds of \$64.9 million in an underwritten public offering pursuant to our Registration Statement on Form S-3 (File No. 333-217102). On March 9, 2020 we filed a Registration Statement on Form S-3 (File No. 333-237040), covering the offering of up to \$200 million of shares of common stock, preferred stock, warrants and units and entered into a Sales Agreement ("2020 Sales Agreement") with Jefferies to sell shares of our common stock, from time to time, with aggregate gross sales proceeds of up to \$50,000,000, through an at-the-market equity offering program under which Jefferies will act as our sales agent. As of March 31, 2022, we had sold 6,920,339 shares of common stock for gross proceeds of \$31.1 million under the 2020 Sales Agreement. On November 1, 2021 we entered into another Sales Agreement ("2021 Sales Agreement") with Jefferies to sell shares of our common stock, from time-to-time, with aggregate gross sales proceeds of up to

\$40,000,000. As of March 31, 2022, \$18.9 million remained for sale under the 2020 Sales Agreement and \$40.0 million remained for sale under the 2021 Sales Agreement.

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

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. Moreover, certain holders of shares of our common stock have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We have registered and intend to continue to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates.

We are a smaller reporting company and the reduced reporting requirements applicable to smaller reporting companies may make our common stock less attractive to investors.

We are a smaller reporting company, which allows us to take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not smaller reporting companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended, reduced disclosure obligations regarding executive compensation in our Annual Report and our periodic reports and proxy statements and providing only two years of audited financial statements in our Annual Report and our periodic reports. We will remain an smaller reporting company until (a) the aggregate market value of our outstanding common stock held by non-affiliates as of the last business day our most recently completed second fiscal quarter exceeds \$250 million or (b) (1) we have over \$100 million in annual revenues and (2) the aggregate market value of our outstanding common stock held by non-affiliates as of the last business day our most recently completed second fiscal quarter exceeds \$700 million. We cannot predict whether investors will find our common stock less attractive if we rely on certain or all of these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile and may decline.

If we fail to maintain proper and effective internal control over financial reporting, our ability to produce accurate and timely consolidated financial statements could be impaired, investors may lose confidence in our financial reporting and the trading price of our common stock may decline.

Pursuant to Section 404 of Sarbanes-Oxley, if we are an accelerated filer, our independent registered public accounting firm will be required to attest to the effectiveness of our internal control over financial reporting. The rules governing the standards that must be met for management to assess our internal control over financial reporting are complex and require significant documentation, testing and possible remediation. To continue to comply with the requirements of being a reporting company under the Exchange Act, as we continue to grow, we will need to upgrade our systems including information technology; implement additional financial and management controls, reporting systems and procedures; and hire additional accounting and finance staff. If we or, if required, our auditors are unable to conclude that our internal control over financial reporting is effective, investors may lose confidence in our financial reporting and the trading price of our common stock may decline.

We cannot assure our stockholders that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations or cash flows. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting once that firm begin its Section 404 reviews, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by Nasdaq, the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of management.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could significantly reduce the value of our shares to a potential acquiror or delay or prevent changes in control or changes in our management without the consent of our board of directors. The provisions in our charter documents include the following:

- a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors;
- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the exclusive right of our board of directors, unless the board of directors grants such right to the stockholders, to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors:
- the required approval of at least 66 2/3% of the shares entitled to vote to remove a director for cause, and the prohibition on removal of directors without cause;
- the ability of our board of directors to authorize the issuance of shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquiror;
- the ability of our board of directors to alter our amended and restated bylaws without obtaining stockholder approval;
- the required approval of at least 66 2/3% of the shares entitled to vote to adopt, amend or repeal our amended and restated bylaws or repeal the provisions of our amended and restated certificate of incorporation regarding the election and removal of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- an exclusive forum provision providing that the Court of Chancery of the State of Delaware will be the
 exclusive forum for certain actions and proceedings;
- the requirement that a special meeting of stockholders may be called only by the board of directors, which
 may delay the ability of our stockholders to force consideration of a proposal or to take action, including the
 removal of directors; and
- advance notice procedures that stockholders must comply with in order to nominate candidates to our board
 of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter
 a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or
 otherwise attempting to obtain control of us.

We are also subject to the anti-takeover provisions contained in Section 203 of the Delaware General Corporation Law. Under Section 203, a corporation may not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other exceptions, the board of directors has approved the transaction.

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

Our amended and restated certificate of incorporation and amended and restated bylaws provide that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty, any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine. This provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find this provision in our amended and restated certificate of incorporation and amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business and financial condition. This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the U.S. federal courts have exclusive jurisdiction.

General Risks

Our future growth may depend, in part, on our ability to operate in foreign markets, where we would be subject to additional regulatory burdens and other risks and uncertainties.

Our future growth may depend, in part, on our ability to develop and commercialize our product candidates in foreign markets. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from applicable regulatory authorities in foreign markets, and we may never receive such regulatory approvals for any of our product candidates. To obtain separate regulatory approval in many other countries we must comply with numerous and varying regulatory requirements regarding safety and efficacy and governing, among other things, clinical trials, commercial sales, pricing and distribution of our product candidates. If we obtain regulatory approval of our product candidates and ultimately commercialize our product candidates in foreign markets, we would be subject to additional risks and uncertainties, including the burden of complying with complex and changing foreign regulatory, tax, accounting and legal requirements and the reduced protection of intellectual property rights in some foreign countries.

Recent U.S. tax legislation and future changes to applicable U.S. or foreign tax laws and regulations may have a material adverse effect on our business, financial condition and results of operations.

We are subject to income and other taxes in the U.S. and foreign jurisdictions. Changes in laws and policy relating to taxes or trade may have an adverse effect on our business, financial condition and results of operations. For example, the U.S. government recently enacted significant tax reform, and certain provisions of the new law may adversely affect us. Changes include, but are not limited to, a federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a more generally territorial system, and a one-time transition tax on the mandatory deemed repatriation of foreign earnings. The legislation is unclear in many respects and could be subject to potential amendments and technical corrections, and will be subject to interpretations and implementing regulations by the Treasury and Internal Revenue Service, any of which could mitigate or increase certain adverse effects of the legislation. In addition, it is unclear how these U.S. federal income tax changes will affect state and local taxation. Generally, future changes in applicable U.S. or foreign tax laws and regulations, or their interpretation and application could have an adverse effect on our business, financial conditions and results of operations.

Our information technology systems, or those of any of our existing or potential future collaborators, CROs or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development programs.

We maintain sensitive company data on our information technology systems, including our intellectual property and proprietary business information. We face a number of threats to our networks from unauthorized access, security breaches and other system disruptions. Despite the implementation of security measures, our information technology and other internal computer systems and those of our current and any future CROs and other contractors, consultants and collaborators are vulnerable to damage from cyberattacks, "phishing" attacks, computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Attacks upon information technology systems are increasing in their frequency, levels of persistence, sophistication and intensity, and are being conducted by sophisticated and organized groups and individuals with a wide range of motives and expertise. Furthermore, because the techniques used to obtain unauthorized access to, or to sabotage or disrupt, systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. We may also experience security breaches that may remain undetected for an extended period. Even if identified, we may be unable to adequately investigate or remediate incidents or breaches due to attackers increasingly using tools and techniques that are designed to circumvent controls, to avoid detection, and to remove or obfuscate forensic evidence. As a result of the COVID-19 pandemic, we may also face increased cybersecurity risks due to our reliance on internet technology and the number of our and our service providers' employees who are working remotely, which may create additional opportunities for cybercriminals to exploit vulnerabilities.

We and certain of our service providers are from time to time, subject to cyberattacks and security incidents. While we do not believe that we have experienced any significant system failure, accident or security breach to date, any such security breach may compromise information stored on our networks, or those of our vendors, and may result in significant data losses or theft of our intellectual property or proprietary business information. Further, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs and our business operations, whether due to a loss of our trade secrets or other similar disruptions. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. In addition, such a breach may require notification to governmental agencies, or affected individuals pursuant to applicable data privacy and security laws. We would also be exposed to a risk of loss, including financial assets or litigation and potential liability, which could materially adversely affect our business, reputation, financial condition, results of operations and prospects. We also rely on third parties to manufacture our product candidates, and similar events relating to their computer systems could also have a material adverse effect on our business. 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 confidential or proprietary information, we could incur liability and the further development and commercialization of our product candidates could be delayed.

Changes in and failures to comply with U.S. and foreign privacy and data protection laws, regulations and standards may adversely affect our business, operations and financial performance.

We are subject to or affected by numerous federal, state and foreign laws and regulations, as well as regulatory guidance, governing the collection, use, disclosure, retention, and security of personal data, such as information that we collect about patients and healthcare providers in connection with clinical trials in the United States and abroad. The global data protection landscape is rapidly evolving, and implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future. This evolution may create uncertainty in our business, affect our or our collaborators', service providers' and contractors' ability to operate in certain jurisdictions or to collect, store, transfer use and share personal information, necessitate the acceptance of more onerous obligations in our contracts, result in liability or impose additional costs on us. In the United States, numerous federal and state laws and regulations could apply to our operations or the operations of our partners, including state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws and regulations (e.g. Section 5 of the FTC Act), that govern the collection, use, disclosure, and protection of health-related and other personal information. In addition, we may obtain health information from third parties (including research institutions from which we obtain clinical trial data) that are subject to privacy and security requirements under HIPAA. Depending on the facts and

circumstances, we could be subject to criminal penalties if we knowingly obtain, use, or disclose individually identifiable health information that was provided to us by a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA.

Further, California enacted the CCPA, on June 28, 2018, which went into effect on January 1, 2020. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. Although there are limited exemptions for health-related information, including clinical trial data, the CCPA may increase our compliance costs and potential liability. Further, the CPRA, recently passed in California, which significantly amends the CCPA and will impose additional data protection obligations on covered businesses, including additional consumer rights processes, limitations on data uses, new audit requirements for higher risk data, and opt outs for certain uses of sensitive data. It will also create a new California data protection agency authorized to issue substantive regulations and could result in increased privacy and information security enforcement. The majority of the provisions will go into effect on January 1, 2023, and additional compliance investment and potential business process changes may be required. Similar laws have been proposed in other states and at the federal level, and if passed, such laws may have potentially conflicting requirements that would make compliance challenging.

Our operations abroad may also be subject to increased scrutiny or attention from data protection authorities. Many countries in these regions have established or are in the process of establishing privacy and data security legal frameworks with which we, our collaborators, service providers, including our CRO, and contractors must comply. For example, the GDPR, which went into effect in May 2018, imposes strict requirements for processing the personal data of individuals within the EEA, including clinical trial data. The GDPR has and will continue to increase compliance burdens on us, including by mandating potentially burdensome documentation requirements and granting certain rights to individuals to control how we collect, use, disclose, retain and process information about them. The processing of sensitive personal data, such as physical health condition, may impose heightened compliance burdens under the GDPR and is a topic of active interest among foreign regulators. Further, recent legal developments in Europe have created complexity and uncertainty regarding transfers of personal data from the EEA to the United States, e.g. on July 16, 2020, the Court of Justice of the European Union, or the CJEU invalidated the EU-US Privacy Shield Framework, or the Privacy Shield under which personal data could be transferred from the EEA to US entities who had self-certified under the Privacy Shield scheme. While the CJEU upheld the adequacy of the standard contractual clauses, or SCCs, it made clear that reliance on them alone may not necessarily be sufficient in all circumstances. The European Commission issued revised SCCs on June 4, 2021 to account for the decision of the CJEU and recommendations made by the European Data Protection Board. The revised SCCs must be used for relevant new data transfers from September 27, 2021; existing standard contractual clauses arrangements must be migrated to the revised clauses by December 27, 2022. The new SCCs apply only to the transfer of personal data outside of the EEA and not the UK; the UK's Information Commissioner's Office launched a public consultation on its draft revised data transfers mechanisms in August 2021 and laid its proposal before Parliament, with the UK SCCs expected to come into force in March 2022, with a two-year grace period. As supervisory authorities issue further guidance on personal data export mechanisms, including circumstances where the standard contractual clauses cannot be used, and/or start taking enforcement action, we could suffer additional costs, complaints and/or regulatory investigations or fines, and/or if we are otherwise unable to transfer personal data between and among countries and regions in which we operate, it could affect the manner in which we provide our services, the geographical location or segregation of our relevant systems and operations, and could adversely affect our financial results. In addition, the GDPR provides for robust regulatory enforcement and fines of up to €20 million or 4% of the annual global revenue of the noncompliant company, whichever is greater. Further, from January 1, 2021, we have to comply with the GDPR and the United Kingdom ("UK") GDPR, which, together with the amended UK Data Protection Act 2018, retains the GDPR in UK national law, the latter regime having the ability to separately fine up to the greater of £17.5 million or 4% of global turnover. The relationship between the United Kingdom and the EU in relation to certain aspects of data protection law remains unclear, and it is unclear how United Kingdom data protection laws and regulations will develop in the medium to longer term, and how data transfers to and from the United Kingdom will be regulated in the long term. The European Commission has adopted an adequacy decision in favor of the UK, enabling data transfers from EU member states to the UK without additional safeguards. However, the UK adequacy decision will automatically expire in June 2025 unless the European Commission re-assesses and renews or extends that decision and remains under review by the Commission during this period. In September 2021, the UK government

launched a consultation on its proposals for wide-ranging reform of UK data protection laws following Brexit. There is a risk that any material changes which are made to the UK data protection regime could result in the European Commission reviewing the UK adequacy decision, and the UK losing its adequacy decision if the European Commission deems the UK to no longer provide adequate protection for personal data. The relationship between the UK and the EU in relation to certain aspects of data protection law remains uncertain, and it is unclear how UK data protection laws and regulations will develop in the medium to longer term.

As we expand into other foreign countries and jurisdictions, we may be subject to additional laws and regulations that may affect how we conduct business. 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 regulation, our internal policies and procedures or our contracts governing 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 and consequences for noncompliance are rising.

Our operations could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics and pandemics, such as the COVID-19 pandemic, and other natural or manmade disasters or business interruptions, for which we are predominantly self-insured. We currently rely on several different manufacturers who supply different parts of the ciforadenant molecule and CPI-818 molecule, on one manufacturer for mupadolimab drug substance and on other third-party manufacturers to produce our other product candidates. Our ability to obtain clinical supplies of mupadolimab, CPI-818 and ciforadenant or our other product candidates could be disrupted if the operations of these suppliers were affected by a man-made or natural disaster or other business interruption. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses.

In response to the COVID-19 pandemic, we have limited the use of our physical facilities and many of our employees work remotely. We intend to make full use of our physical facilities after national, state and local authorities have indicated that it is safe to do so. In the event of a continuation of shelter-in-place orders or mandated local travel restrictions, our employees conducting research and development activities may not be able to access our facilities and our activities may be significantly limited or curtailed, possibly for an extended period of time. Furthermore, it is possible that over the long term our operational efficiency may be decreased if our employees and third-party collaborators are unable to meet and work in the same physical location.

Our ability to use net operating loss carryforwards and other tax attributes may be limited.

We have incurred substantial losses during our history and do not expect to become profitable in the near future, and we may never achieve profitability. To the extent that we continue to generate taxable losses, unused losses will carry forward to offset future taxable income, if any, until such unused losses expire. As of December 31, 2021, we had federal net operating loss ("NOL") carryforwards of approximately \$212.6 million and state NOL carryforwards of approximately \$246.3 million available to offset future taxable income. If not utilized, the federal and state NOL carryforwards will begin to expire in various years beginning in 2034. As of December 31, 2021, we also had \$7.9 million of federal and \$4.5 million of state research and development tax credit carryforwards available to reduce future income taxes. The federal research and development tax credits will begin to expire in 2035, if not utilized. The state research and development tax credits have no expiration date. Utilization of NOL carryforwards and credits may be subject to an annual limitation due to the "ownership change" provisions under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended. An "ownership change" is generally defined as a cumulative change in the ownership interest of significant stockholders over a rolling three-year period in excess of 50 percentage points. Similar provisions under state tax law may also apply. If finalized, Treasury Regulations currently proposed under Section 382 of the Code may further limit our ability to utilize our pre-change NOLs or credits if we undergo a future ownership change. We may experience an ownership change in the future as a result of subsequent shifts in our stock ownership, some of which changes are outside our control. Such ownership changes could result in the expiration of our NOL carryforwards and other tax attributes before they can be utilized and, if we are profitable, our future cash flows could be adversely affected due to our increased tax liability.

Additionally, under the Tax Cut and Jobs Act (the "Tax Act"), as modified by the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"), NOL carryforwards arising in tax years beginning after December 31, 2020 are limited to 80% of taxable income. Under the Tax Act, federal NOL carryforwards arising in tax years beginning after December 31, 2017 may be carried forward indefinitely. Under the CARES Act, federal NOL carryforwards arising 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 the tax year of such loss. The changes in the carryforward and carryback periods as well as the limitation on use of NOL carryforwards may significantly impact our ability to use NOL carryforwards, particularly for tax years beginning after December 31, 2020, as well as the timing of any such use, and could adversely affect our results of operations.

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

The trading market for our common stock is influenced by the research and reports that industry or securities analysts publish about us or our business. If any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property or our stock performance, or if our target studies and operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Our business could be negatively impacted by corporate citizenship and ESG matters and or our reporting of such matters

Institutional, individual, and other investors, proxy advisory services, regulatory authorities, consumers and other stakeholders are increasingly focused on environmental, social and governance (ESG) practices of companies. As we look to respond to evolving standards for identifying, measuring, and reporting ESG metrics, our efforts may result in a significant increase in costs and may nevertheless not meet investor or other stakeholder expectations and evolving standards or regulatory requirements, which may negatively impact our financial results, our reputation, our ability to attract or retain employees, our attractiveness as an investment or business partner, or expose us to government enforcement actions, private litigation, and actions by stockholders or stakeholders.

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

Recent Sales of Unregistered Securities.

None

Use of Proceeds from Registered Securities

Not applicable

Repurchases of Shares or of Company Equity Securities

None

Item 3. Defaults Upon Senior Securities

None

Item 4. Mine Safety Disclosures

Not applicable

Item 5. Other Information

None

Item 6. Exhibits

EXHIBIT INDEX

Exhibit		Incorporated by Reference			Filed
Number	Exhibit Description	Form	Date	Number	Herewith
3.1	Amended and Restated Certificate of Incorporation.	8-K	3/29/2016	3.1	
3.2	Amended and Restated Bylaws.	8-K	3/29/2016	3.2	
4.1	Reference is made to Exhibits 3.1 through 3.2.				
4.2	Form of Common Stock Certificate.	S-1	1/4/2016	4.2	
4.3	Amended and Restated Investors' Rights Agreement, dated September 16, 2015, by and among Corvus Pharmaceuticals, Inc. and the investors listed therein.	S-1/A	2/8/2016	4.3	
4.4	Form of Warrant	8-K	11/12/2019	4.1	
4.5	Description of Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934	10-K	3/25/2021	4.5	
31.1	Certification of Chief Executive Officer required by Rule 13a- 14(a) or Rule 15d-14(a).				X
31.2	Certification of Chief Financial Officer required by Rule 13a- 14(a) or Rule 15d-14(a).				X
32.1*	Certification required by Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350).				X
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.				X
101.SCH	Inline XBRL Taxonomy Extension Schema Document.				X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.				X
101.DEF	Inline XBRL Taxonomy Extension Definitions Linkbase Document.				X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.				X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.				X
104	The cover page of Corvus Pharmaceuticals, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, formatted in Inline XBRL (contained in Exhibit 101).				X

^{*} The certification attached as Exhibit 32.1 that accompanies this Quarterly Report on Form 10-Q is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Corvus 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 this Quarterly Report on Form 10-Q, irrespective of any general incorporation language contained in such filing.

Date: May 5, 2022

Date: May 5, 2022

SIGNATURES

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

By:

/s/ Richard. A. Miller

Richard A. Miller, M.D.

President, Chief Executive Officer and Director

(Principal Executive Officer)

By:

/s/ Leiv Lea

Leiv Lea

Chief Financial Officer (Principal Financial and Accounting Officer)

CORVUS PHARMACEUTICALS, INC.

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CERTIFICATION

- I, Richard A. Miller, M.D. President and Chief Executive Officer of Corvus Pharmaceuticals, Inc., certify that:
 - 1. I have reviewed this Quarterly Report on Form 10-Q of Corvus 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;
 - 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 5, 2022 By: /s/ Richard A. Miller

Name: Richard A. Miller, M.D.

Title: President and Chief Executive Officer

Principal Executive Officer

CERTIFICATION

- I, Leiv Lea, Chief Financial Officer of Corvus Pharmaceuticals, Inc., certify that:
 - 1. I have reviewed this Quarterly Report on Form 10-Q of Corvus 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 5, 2022 By: /s/ Leiv Lea

Name: Leiv Lea

Title: Chief Financial Officer

Principal Financial and Accounting Officer

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Corvus Pharmaceuticals, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended March 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Richard A. Miller, President and Chief Executive Officer of the Company, and Leiv Lea, Chief Financial Officer of the Company, respectively, do each hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Richard A. Miller

Richard A. Miller, M.D.
President and Chief Executive Officer
(Principal Executive Officer)

Date: May 5, 2022

/s/ Leiv Lea

Leiv Lea

Chief Financial Officer

(Principal Financial and Accounting Officer)

Date: May 5, 2022

This certification accompanies the Report on 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 Corvus 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 this Report on Form 10-Q), irrespective of any general incorporation language contained in such filing.