Calithera Biosciences, Inc.
Form 10-Q
August 08, 2017

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended June 30, 2017

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission File Number: 001-36644

CALITHERA BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware	27-2366329
(State or other jurisdiction	(I.R.S. Employer
of incorporation or organization)	Identification No.)

343 Oyster Point Blvd., Suite 200

South San Francisco, CA 94080

(Address of principal executive offices including zip code)

Registrant's telephone number, including area code: (650) 870-1000

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

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

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

Large accelerated filer		Accelerated filer
Non-accelerated filer	(do not check if a smaller reporting company)	Smaller reporting company

Emerging Growth Company

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

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

As of August 4, 2017, the registrant had 35,476,681 shares of common stock, $0.0001 par value per share, outstanding.

Calithera Biosciences, Inc.

Quarterly Report on Form 10-Q

For the Quarter Ended June 30, 2017

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PART I. – FINANCIAL INFORMATION

Item 1. Financial Statements

Calithera Biosciences, Inc.

Condensed Consolidated Balance Sheets

(Unaudited)

(In thousands, except per share amounts)

	June 30, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$57,997	$10,601
Short-term investments	108,234	41,180
Receivable from collaboration	2,303	—
Prepaid expenses and other current assets	1,853	1,780
Total current assets	170,387	53,561
Long-term investments	41,953	—
Other assets	325	290
Restricted cash	440	46
Property and equipment, net	977	899
Total assets	$214,082	$54,796
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$410	$398
Accrued liabilities	5,007	4,055
Current portion of deferred revenue	29,017	—
Total current liabilities	34,434	4,453
Deferred revenue, less current portion	16,536	—
Deferred rent	648	437
Total liabilities	51,618	4,890
Commitments and contingencies		
Stockholders' equity:		
Common stock, $0.0001 par value, 200,000 shares authorized as of June 30, 2017 and December 31, 2016; 35,457 and 21,502 shares issued and outstanding as of June 30, 2017 and December 31, 2016, respectively	4	2
Additional paid-in capital	295,881	172,419
Accumulated deficit	(133,287)	(122,502)

Accumulated other comprehensive loss	(134)	(13)
Total stockholders' equity	162,464	49,906
Total liabilities and stock and stockholders' equity	$214,082	$54,796

See accompanying notes.

Calithera Biosciences, Inc.

Condensed Consolidated Statements of Operations

(Unaudited)

(In thousands, except per share amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenue:				
Collaboration revenue	$7,255	$—	$11,447	$—
Total revenue	7,255	—	11,447	—
Operating expenses:				
Research and development	10,142	7,776	16,782	14,842
General and administrative	2,848	2,665	6,156	5,256
Total operating expenses	12,990	10,441	22,938	20,098
Loss from operations	(5,735)	(10,441)	(11,491)	(20,098)
Interest income, net	541	83	710	158
Net loss	$(5,194)	$(10,358)	$(10,781)	$(19,940)
Net loss per share, basic and diluted	$(0.15)	$(0.55)	$(0.36)	$(1.07)
Weighted average common shares used to compute net loss per share, basic and diluted	35,348	18,987	30,342	18,688

See accompanying notes.

Calithera Biosciences, Inc.

Condensed Consolidated Statements of Comprehensive Loss

(Unaudited)

(In thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Net loss	$(5,194)	$(10,358)	$(10,781)	$(19,940)
Other comprehensive gain (loss):				
Net unrealized gain (loss) on available-for-sale securities	(103)	14	(121)	87
Total comprehensive loss	$(5,297)	$(10,344)	$(10,902)	(19,853)

See accompanying notes.

Calithera Biosciences, Inc.

Condensed Consolidated Statements of Cash Flows

(Unaudited)

(In thousands)

	Six Months Ended June 30,	
	2017	2016
Cash Flows Provided By (Used In) Operating Activities		
Net loss	$(10,781)	$(19,940)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	164	152
Amortization of premiums on investments	231	343
Stock-based compensation	2,503	2,114
Loss on disposal of property and equipment	6	—
Changes in operating assets and liabilities:		
Receivable from collaboration	(2,303)	—
Prepaid expenses and other current assets	(73)	618
Other assets	(35)	281
Accounts payable	12	884
Accrued liabilities	931	254
Deferred revenue	45,553	—
Deferred rent	211	46
Net cash provided by (used in) operating activities	36,419	(15,248)
Cash Flows Provided By (Used In) Investing Activities		
Purchases of investments	(146,268)	(24,060)
Proceeds from sale or maturity of investments	36,909	36,570
Purchase of property and equipment	(227)	(211)
Change in restricted cash	(394)	—
Net cash provided by (used in) investing activities	(109,980)	12,299
Cash Flows Provided By Financing Activities		
Proceeds from issuance of common stock upon public offering, net	75,386	—
Proceeds from issuance of common stock under stock purchase agreement, net	7,914	—
Proceeds from issuance of common stock through an at-the-market offering, net	36,907	3,971
Proceeds from stock option exercises and employee stock plan purchases	750	199
Net cash provided by financing activities	120,957	4,170
Net increase in cash and cash equivalents	47,396	1,221
Cash and cash equivalents at beginning of period	10,601	6,105
Cash and cash equivalents at end of period	$57,997	$7,326

See accompanying notes.

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Calithera Biosciences, Inc.

Notes to Condensed Consolidated Financial Statements

1. Organization and Basis of Presentation

Organization

Calithera Biosciences, Inc. (the “Company”) was incorporated in the State of Delaware on March 9, 2010. The Company is a clinical-stage biopharmaceutical company focused on discovering and developing novel small molecule drugs directed against tumor metabolism and tumor immunology targets for the treatment of cancer. The Company’s principal operations are based in South San Francisco, California, and it operates in one segment.

Presentation

The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, Calithera Biosciences UK Limited incorporated on April 20, 2017. All significant intercompany accounts and transactions have been eliminated from the condensed consolidated financial statements.

2. Summary of Significant Accounting Policies

Unaudited Interim Financial Information

The interim condensed consolidated balance sheet as of June 30, 2017, and the statements of operations, comprehensive loss, and cash flows for the six months ended June 30, 2017 and 2016 are unaudited. The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the annual financial statements and reflect, in the opinion of management, all adjustments of a normal and recurring nature that are necessary for the fair presentation of the Company’s condensed consolidated financial statements included in this report. The financial data and the other information disclosed in these notes to the condensed consolidated financial statements related to the six-month periods are also unaudited. The results of operations for the six months ended June 30, 2017 are not necessarily indicative of the results to be expected for the year ending December 31, 2017 or for any other future annual or interim period. The balance sheet as of December 31, 2016 included herein was derived from the audited financial statements as of that date. These condensed consolidated financial statements should be read in conjunction with the Company’s audited financial statements included in the Company’s Form 10-K as filed with the Securities and Exchange Commission (“SEC”).

Use of Estimates

The accompanying condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”). The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, management evaluates its estimates, including those related to clinical trial accrued liabilities, revenue recognition, fair value of marketable securities, income taxes, and stock-based compensation. Management bases its estimates on historical experience and on various other market specific and relevant assumptions that management believes to be reasonable under the circumstances. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments with original maturities of three months or less at the date of purchase to be cash equivalents. Cash equivalents which consist primarily of amounts invested in money market accounts, are stated at fair value.

Restricted Cash

Restricted cash consists of money market funds held by the Company’s financial institution as collateral for the Company’s obligations under its facility lease for the Company’s corporate headquarters in South San Francisco, California.

Investments

All investments have been classified as “available-for-sale” and are carried at estimated fair value as determined based upon quoted market prices or pricing models for similar securities. Management determines the appropriate classification of its investments at the time of purchase and reevaluates such designation as of each balance sheet date. Unrealized gains and losses are excluded from earnings and are reported as a component of comprehensive loss. Realized gains and losses and declines in fair value judged to be other than temporary, if any, on available-for-sale securities are included in interest income, net. The cost of securities sold is based on the specific-identification method. Interest on marketable securities is included in interest income, net.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash, cash equivalents, investments and restricted cash. The Company invests in a variety of financial instruments and, by its policy, limits these financial instruments to high credit quality securities issued by the U.S. government, U.S. government-sponsored agencies and highly rated banks and corporations, subject to certain concentration limits. The Company’s cash, cash equivalents, investments and restricted cash are held by financial institutions in the United States that management believes are of high credit quality. Amounts on deposit may at times exceed federally insured limits.

All of the Company’s receivable from collaboration and collaboration revenue are derived from its collaboration and license agreement with Incyte Corporation (“Incyte”) as described in Note 9 Collaboration and Licensing Agreements - Incyte Collaboration and License Agreement.

Revenue Recognition

The Company recognizes revenue from collaboration, license or research arrangements when persuasive evidence of an arrangement exists; transfer of technology has been completed, services are performed or products have been delivered; the fee is fixed or determinable; and collection is reasonably assured. For arrangements with multiple deliverables, the Company evaluates each deliverable to determine whether it qualifies as a separate unit of accounting. This determination is based on whether the deliverable has stand-alone value to the customer. If the Company determines that the deliverables do not have stand-alone value then all such deliverables are combined into one or more units of accounting, with consideration given to whether one deliverable is considered the predominant deliverable under the arrangement.

The selling price used for each unit of accounting will be based on vendor-specific objective evidence, if available, third-party evidence if vendor-specific objective evidence is not available or estimated selling price if neither vendor-specific nor third-party evidence is available. Management may be required to exercise considerable judgment in determining whether a deliverable is a separate unit of accounting and in estimating the selling prices of identified units of accounting for new agreements. Where multiple deliverables are combined as a single unit of accounting, revenues are recognized based on the performance requirements of the related agreement. For a combined unit of accounting, non-refundable upfront payments are recognized in a manner consistent with the final deliverable, which has generally been ratably over the estimated period of continued involvement. Management periodically reviews the basis for its estimates, and it may change the estimates if circumstances change. These changes can significantly change the timing of revenue recognized. Amounts received in advance of performance are recorded as deferred revenue. Upfront payments are classified as collaboration revenue in the Company’s condensed consolidated statements of operations.

The Company has not made a policy election to use the milestone method of accounting. Instead, the Company will account for milestone payments over the remaining period of performance for the combined unit of account. Therefore, the development and commercial milestones, if and when achieved, will be recorded as revenue over the period of performance for the combined unit of account. If there are no remaining performance obligations, milestone payments will be recognized when the event is achieved and the applicable revenue criteria are met.

Accrued Research and Development Costs

The Company records accrued liabilities for estimated costs of research and development activities conducted by third-party service providers, which include the conduct of preclinical and clinical studies, and contract manufacturing activities. The Company records the estimated costs of research and development activities based upon the estimated amount of services provided but not yet invoiced, and includes these costs in accrued liabilities in the balance sheets and within research and development expense in the statements of operations. These costs are a significant component of the Company's research and development expenses. The Company accrues for these costs based on factors such as estimates of the work completed and in accordance with agreements established with its third-party service providers under the service agreements. The Company makes significant judgments and estimates in determining the accrued liabilities balance in each reporting period. As actual costs become known, the Company adjusts its accrued liabilities. The Company has not experienced any material differences between accrued costs and actual costs incurred. However, the status and timing of actual services performed, number of patients enrolled, and the rate of patient enrollments may vary from the Company's estimates, resulting in adjustments to expense in future periods. Changes in these estimates that result in material changes to the Company's accruals could materially affect the Company's results of operations.

Net Loss Per Share

Basic net loss per share is calculated by dividing the net loss by the weighted average number of shares of common stock outstanding during the period without consideration of common stock equivalents. Since the Company was in a loss position for all periods presented, basic net loss per share is the same as diluted net loss per share for all periods as the inclusion of all potential common shares outstanding would have been anti-dilutive.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued a comprehensive new standard on revenue from contracts with customers, Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers (Topic 606). The standard's core principle is that a reporting entity will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. On July 9, 2015, the FASB voted to delay the effective date of the new standard by one year. The standard would become effective for the Company beginning in the first quarter of 2018. Early application would be permitted in 2017. Entities would have the option of using either a full retrospective or a modified retrospective approach to adopt this new guidance. In 2016, the FASB updated the guidance for reporting revenue gross versus net to improve the implementation guidance on principal versus agent considerations, and for identifying performance obligations and the accounting of intellectual property licenses. In addition, the FASB introduced practical expedients and made narrow scope improvements to the new accounting guidance.

The Company currently plans to adopt the accounting standard update on January 1, 2018 and has not determined which adoption method it will utilize. The Company is currently at the early stages of analyzing its collaboration and license agreement with Incyte to determine the differences in the accounting treatment under ASU 2014-09 compared to the current accounting treatment. The consideration the Company is eligible to receive under this agreement includes upfront payments, research and development funding, milestone payments, and royalties. The new revenue recognition standard differs from the current accounting standard in many respects, such as in the accounting for variable consideration and the measurement of progress toward completion of performance obligations. While the Company has not completed an assessment of the impact of adoption, the adoption of ASU 2014-09 may have a material effect on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases, which is aimed at making leasing activities more transparent, and requires substantially all leases be recognized by lessees on their balance sheet as a right-of-use asset and corresponding lease liability, including leases currently accounted for as operating leases. The ASU is effective for all interim and annual reporting periods beginning after December 15, 2018 with early adoption permitted. The Company is currently assessing the impact the adoption of ASU 2016-02 will have on the consolidated financial statements. The Company plans to adopt the new standard effective January 1, 2019.

In March 2016, the FASB issued ASU No. 2016-09, Improvements to Employee Share-Based Payment Accounting, which is intended to simplify several aspects of the accounting for share-based payment award transactions, including the income tax consequences, an option to recognize gross stock compensation expense with actual forfeitures recognized as they occur, as well as certain classifications on the statement of cash flows. The Company adopted ASU No. 2016-09 on January 1, 2017 following the modified retrospective approach. Under this guidance, on a prospective basis, companies will no longer record excess tax benefits and certain tax deficiencies in additional paid-in capital ("APIC"). Instead, they will record all excess tax benefits and tax deficiencies as income tax expense or benefit in the income statement. In addition, the guidance eliminates the requirement that excess tax benefits be realized before companies can recognize them. The ASU requires a cumulative-effect adjustment for previously unrecognized excess tax benefits in opening retained earnings in the annual period of adoption. As of January 1, 2017, the Company had no previously unrecognized excess tax benefits. Additionally, as provided for under this new guidance, the Company elected to account for forfeitures as they occur. The impact upon adoption of this election was a $5,000 cumulative-effect adjustment, which was recorded to accumulated deficit in stockholders' equity in the condensed consolidated balance sheet.

3. Fair Value Measurements

Fair value accounting is applied for all financial assets and liabilities that are recognized or disclosed at fair value in the consolidated financial statements on a recurring basis (at least annually). Financial instruments include cash and cash equivalents, short-term investments, receivable from collaboration, accounts payable, accrued liabilities and the current portion of deferred revenue that approximate fair value due to their relatively short maturities.

Assets and liabilities recorded at fair value on a recurring basis in the balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair values. Fair value is defined as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The authoritative guidance on fair value measurements establishes a three tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2—Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level 3—Unobservable inputs that are significant to the measurement of the fair value of the assets or liabilities that are supported by little or no market data.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Where quoted prices are available in an active market, securities are classified as Level 1. The Company classifies money market funds as Level 1. When quoted market prices are not available for the specific security, then the Company estimates fair value by using quoted prices for identical or similar instruments in markets that are not active and model-based valuation techniques for which all significant inputs are observable in the market or can be corroborated by observable market data for substantially the full term of the assets. Where applicable, these models project future cash flows and discount the future amounts to a present value using market-based observable inputs obtained from various third party data providers, including but not limited to, benchmark yields, interest rate curves, reported trades, broker/dealer quotes and market reference data. The Company classifies its corporate notes and U.S. government agency securities as Level 2. Level 2 inputs for the valuations are limited to quoted prices for similar assets or liabilities in active markets and inputs other than quoted prices that are observable for the asset or liability. There were no transfers between Level 1 and Level 2 during the periods presented.

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The following table sets forth the fair value of our financial assets and liabilities, allocated into Level 1, Level 2 and Level 3, that was measured on a recurring basis (in thousands):

	June 30, 2017			
	Level 1	Level 2	Level 3	Total
Financial Assets:				
Money market funds	$12,929	$—	$ —	$12,929
Corporate notes and commercial paper	—	104,523	—	104,523
U.S. treasury securities	—	39,547	—	39,547
U.S. government agency securities	—	51,047	—	51,047
Total financial assets	$12,929	$195,117	$ —	$208,046

	December 31, 2016			
	Level 1	Level 2	Level 3	Total
Financial Assets:				
Money market funds	$9,354	$—	$ —	$9,354
Corporate notes and commercial paper	—	23,314	—	23,314
U.S. treasury securities	—	2,000	—	2,000
U.S. government agency securities	—	16,666	—	16,666
Total financial assets	$9,354	$41,980	$ —	$51,334

4. Financial Instruments

Cash equivalents and investments, all of which are classified as available-for-sale securities and restricted cash, consisted of the following (in thousands):

	June 30, 2017				December 31, 2016			
	Cost	Unrealized Gain	Unrealized (Loss)	Estimated Fair Value	Cost	Unrealized Gain	Unrealized (Loss)	Estimated Fair Value
Money market funds	$12,929	$ —	$ —	$12,929	$9,354	$ —	$ —	$9,354
Corporate notes and commercial paper	104,558	—	(35)	104,523	23,325	—	(11)	23,314
U.S. treasury securities	39,596	—	(49)	39,547	2,000	—	—	2,000
U.S. government agency securities	51,097	—	(50)	51,047	16,668	1	(3)	16,666
	$208,180	$ —	$ (134)	$208,046	$51,347	$ 1	$ (14)	$51,334
Classified as:								
Cash equivalents				$57,419				$10,108
Short-term investments				108,234				41,180
Long-term investments				41,953				—
Restricted cash				440				46
Total				$208,046				$51,334

At June 30, 2017, the remaining contractual maturities of available-for-sale securities were less than two years. There have been no significant realized gains or losses on available-for-sale securities for the periods presented. As of June 30, 2017, the Company had a total of $208.2 million in cash, cash equivalents, and investments, which includes $0.6 million in cash and $207.6 million in cash equivalents and investments.

5. Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	June 30, 2017	December 31, 2016
Accrued bonus and payroll expenses	$1,789	$ 2,471
Accrued professional and consulting services	209	202
Accrued clinical and manufacturing expenses	2,756	1,208
Accrued preclinical and research expenses	47	91
Other	206	83
Total accrued liabilities	$5,007	$ 4,055

6. Stockholders' Equity

Public Offering

In March 2017, the Company entered into an underwriting agreement with Leerink Partners LLC, as representative of several underwriters named therein (collectively, the "Underwriters"), pursuant to which the Company issued and sold 7,854,500 shares of common stock, including 1,024,500 shares sold pursuant to the Underwriters' exercise in full of their option to purchase additional shares. The price to the public in the offering was $10.25 per share, and the Underwriters purchased the shares from the Company at a price of $9.635 per share. The net proceeds to the Company from this public offering were approximately $75.4 million, after deducting underwriting discounts and commissions and other offering expenses.

Incyte Stock Purchase Agreement

In January 2017, the Company entered into a stock purchase agreement with Incyte, pursuant to which the Company issued and sold 1,720,430 shares of common stock, at a price of $4.65 per share to Incyte, resulting in net proceeds of approximately $7.9 million, after deducting offering expenses.

At-the-Market Offering

In November 2015, the Company entered into a sales agreement with Cowen and Company LLC ("Cowen"), as sales agent and underwriter, pursuant to which the Company could issue and sell shares of its common stock with an aggregate maximum offering price of $50.0 million under an at-the-market ("ATM") offering program. The Company paid Cowen up to 3% of gross proceeds for the common stock sold through the sales agreement.

During the three months ended March 31, 2017, the Company sold an aggregate of 4,188,679 shares of common stock pursuant to the ATM program, at an average price of approximately $9.06 per share for gross proceeds of $38.0 million, resulting in net proceeds of $36.9 million after deducting underwriting fees and offering expenses. As of March 31, 2017, the Company had sold all available shares under the November 2015 ATM program.

7. Stock Based Compensation

A summary of stock option activity is as follows (in thousands, except weighted-average exercise price and contractual term amounts):

	Options Outstanding			
	Number of Shares Underlying Outstanding Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding — December 31, 2016	3,228	$ 6.41		
Options granted	304	$ 13.84		
Options exercised	(112)	$ 4.73		
Options cancelled	(22)	$ 4.56		
Outstanding — June 30, 2017	3,398	$ 7.15	8.32	$ 27,428
Exercisable — June 30, 2017	1,283	$ 7.69	7.36	$ 9,891
Vested and expected to vest — June 30, 2017	3,398	$ 7.15	8.32	$ 27,428

Total stock-based compensation expense related to the Company's 2010 Equity Incentive Plan, 2014 Equity Incentive Plan and the 2014 Employee Stock Purchase Plan was as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Research and development	$744	$479	$1,349	$916
General and administrative	610	608	1,154	1,198
Total stock-based compensation	$1,354	$1,087	$2,503	$2,114

8. Net Loss per Share

Since the Company was in a loss position for all periods presented, diluted net loss per share is the same as basic net loss per share for all periods as the inclusion of all potential common shares outstanding would have been anti-dilutive.

Potentially dilutive securities that were not included in the diluted net loss per share calculations because they would be anti-dilutive were as follows (in thousands):

	June 30,	
	2017	2016
Options to purchase common stock	3,397	2,537
Employee stock plan purchases	37	15
Total	3,434	2,552

9. Collaboration and Licensing Agreements

Incyte Collaboration and License Agreement

On January 27, 2017, the Company entered into a collaboration and license agreement with Incyte (the "Incyte Collaboration Agreement"). Under the terms of the Incyte Collaboration Agreement, the Company granted Incyte an exclusive, worldwide license to develop and commercialize its small molecule arginase inhibitors for hematology and oncology indications. The parties are collaborating on and co-funding the development of the licensed products, with Incyte bearing 70% and the Company bearing 30% of global development costs. The parties will share profits and losses in the United States, with 60% to Incyte and 40% to the Company. The Company will have the right to co-detail the licensed products in the United States, and Incyte will pay the Company tiered royalties ranging from the low to mid-double digits on net sales of licensed products outside the United States. The Company may opt out of its co-funding obligation, in which case the United States profit sharing will no longer be in effect, and Incyte will pay the Company tiered royalties ranging from the low to mid-double digits on net sales of licensed products both in the United States and outside the United States, and additional royalties to reimburse the Company for previously incurred development costs.

Under the Incyte Collaboration Agreement, the Company received an upfront payment of $45.0 million in February 2017. In March 2017, the Company achieved a development milestone of $12.0 million, for which the Company received payment in May of 2017. The Company is also eligible to receive up to an additional $418.0 million in potential development, regulatory and sales milestones. Incyte and the Company will share in any future United States net profits and losses, with the Company bearing 40% and Incyte bearing 60%, respectively, and outside the United States the Company will be eligible to receive from Incyte tiered royalties, with rates in the low to mid-teens of sales.

The Incyte Collaboration Agreement also provides that the Company may choose to opt out of its co-funding obligations at any time. In this scenario, the potential development, regulatory and commercialization milestones from Incyte will be up to an additional $738.0 million. The Company would no longer be eligible to receive future United States profits and losses but would be eligible to receive tiered royalty payments on future global sales, including United States sales. In addition, if the Company opts out, the Company will receive an incremental 3% royalty on annual net sales in the United States of such licensed product until such incremental royalty equals 120% of previous development expenditures incurred by the Company.

The upfront payment of $45.0 million will be recognized over the estimated period of performance under the Incyte Collaboration Agreement, which approximates two years, ending January 2019. The deliverables under the Incyte Collaboration Agreement consist of intellectual property licenses and the performance of certain manufacturing and manufacturing technology transfer services. The Company considered the provisions of the revenue recognition multiple-element arrangement guidance and concluded that the delivered licenses do not have stand-alone value, and the rights conveyed to Incyte do not permit Incyte to perform all efforts necessary to use the Company's technology to bring the compound through development and, upon regulatory approval, commercialization of the compound, without the associated manufacturing and technology transfer services. Accordingly, the Company combined these deliverables and allocated the upfront consideration of $45.0 million to the combined unit of accounting. In the first quarter of 2017, the Company earned a $12.0 million developmental milestone payment from Incyte, which is being recognized as revenue over the remaining period of performance for the combined unit of accounting.

Net costs associated with co-development activities performed under the agreement are included in research and development expenses in the accompanying condensed consolidated statements of operations, with any reimbursement of costs by Incyte reflected as a reduction of such expenses.

For the three and six months ended June 30, 2017, the Company recognized revenue from its collaboration with Incyte totaling $7.3 million and $11.4 million, respectively, related to amortization of the $45.0 million upfront fee and the $12.0 million milestone. The remaining balance of $45.6 million is included in deferred revenue at June 30, 2017. For the three and six months ended June 30, 2017, net costs reimbursable by Incyte were $2.1 million and $3.6 million, respectively, which were recorded as a reduction of research and development expenses in the condensed consolidated statement of operations. As of June 30, 2017, the receivable due from Incyte was $2.3 million.

Symbioscience License Agreement

In December 2014, the Company entered into an exclusive license agreement with Mars, Inc., by and through its Mars Symbioscience division (“Symbioscience”), under which the Company has been granted the exclusive, worldwide license to develop and commercialize Symbioscience’s portfolio of arginase inhibitors for use in human healthcare (“Symbioscience License Agreement”). Under the terms of the Symbioscience License Agreement, the Company paid Symbioscience an upfront license fee of $0.3 million, which was recorded in research and development expense in 2014. For the three and six months ended June 30, 2016, the Company made a milestone payment of zero and $0.2 million, respectively, which was recorded in research and development expenses in the statement of operations. There were no expenses related to its licensing arrangement with Mars Symbioscience recorded in the three and six months ended June 30, 2017.

The Company may make future payments of up to $23.6 million contingent upon attainment of various development and regulatory milestones and $95.0 million contingent upon attainment of various sales milestones. Additionally, the Company will pay royalties on sales of the licensed product, if such product sales are ever achieved. If the Company develops additional licensed products, after achieving regulatory approval of the first licensed product, the Company would owe additional regulatory milestone payments and additional royalty payments based on sales of such additional licensed products.

vTv License Agreement

In March 2015, the Company entered into a License and Research agreement with High Point Pharmaceuticals, LLC and TransTech Pharma LLC (“collectively TransTech”) under which the Company obtained an exclusive, worldwide license to develop and commercialize TransTech’s hexokinase II inhibitors (“vTv License Agreement”). The agreement was subsequently assigned by TransTech to its parent company, vTv Therapeutics LLC (“vTv”). Under the terms of the vTv License Agreement, the Company paid an initial license fee of $0.6 million, which was recorded in research and development expense in 2015. There were no expenses recorded for the three and six months ended June 30, 2017 and 2016.

The Company may pay potential development and regulatory milestone payments totaling up to $30.5 million for the first licensed product. vTv is eligible for an additional $77.0 million in potential sales-based milestones, as well as royalty payments, at mid-single digit royalty rates, based on tiered sales of the first commercialized licensed product. If the Company develops additional licensed products, after achieving regulatory approval of the first licensed product, the Company would owe additional regulatory milestone payments and additional royalty payments based on sales of such additional licensed products. The Company will be responsible for the worldwide development and commercialization of the licensed products, at its cost.

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 in conjunction with our unaudited condensed consolidated financial statements and related notes included in Part I, Item 1 of this report.

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements are identified by words such as "believe," "will," "may," "estimate," "continue," "anticipate," "intend," "should," "plan," "expect," "predict," "could," "potentially" or the negative of th similar expressions. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition, or state other "forward-looking" information. These statements relate to our future plans, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in this report in Part II, Item 1A — "Risk Factors," and elsewhere in this report. Forward-looking statements are based on our management's beliefs and assumptions and on information currently available to our management. These statements, like all statements in this report, speak only as of their date, and we undertake no obligation to update or revise these statements in light of future developments. We caution investors that our business and financial performance are subject to substantial risks and uncertainties.

Overview

We are a clinical-stage pharmaceutical company focused on discovering and developing novel small molecule oncology drugs directed against tumor and immune cell targets that control key metabolic pathways in the tumor microenvironment. Tumor metabolism and immuno-oncology ("I-O") have emerged as promising new fields for cancer drug discovery, and recent clinical successes with therapeutic agents in each field have demonstrated the potential to create fundamentally new therapies for cancer patients. We are developing agents that take advantage of the unique metabolic requirements of tumor cells and cancer-fighting immune cells such as cytotoxic T-cells. Our lead product candidate, CB-839, is an internally discovered, first-in-class oral inhibitor of glutaminase, a critical enzyme in tumor cells. CB-839 administered as a single agent has resulted in clinical responses in renal cell cancer and acute myeloid leukemia. We are currently enrolling patients in a randomized, double blind, placebo controlled Phase 2 trial in renal cell carcinoma ("RCC") and a Phase 2 trial in triple negative breast cancer ("TNBC"). We are also enrolling patients in a series of combination Phase 1/2 cohorts in specific solid tumor types including a trial in combination with cabozantinib in RCC patients, and a trial in combination with nivolumab in RCC, melanoma and non-small cell lung cancer patients. CB-839 has been very well tolerated both as a single agent and in combination with other therapies. Our second product candidate, CB-1158, is a first-in-class oral inhibitor of arginase, an enzyme that depletes the amino acid arginine, a key metabolic nutrient for T-cells, and is being co-developed with Incyte Corporation ("Incyte"), for hematology and oncology indications. CB-1158, also known as INCB001158, is currently being tested in a Phase 1 clinical trial in patients with solid tumors as a single agent and in combination with a PD-1 inhibitor. We also have ongoing research efforts that are focused on discovering additional product candidates against novel tumor metabolism and immunology targets.

CB-839 takes advantage of the pronounced dependency many cancers have on the nutrient glutamine for growth and survival. CB-839 inhibits glutaminase, an enzyme required by cancer cells to utilize glutamine effectively. In preclinical studies, CB 839 demonstrated broad antitumor activity in tumor cell lines, inhibited the growth of human tumors in animal models and was well tolerated in toxicity studies. CB-839 was also synergistic with several approved, standard of care, cancer therapeutics. We believe CB-839 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 is the only selective glutaminase inhibitor currently in clinical trials. We currently retain all commercial rights to CB-839 and have been granted a U.S. patent, which includes composition of matter coverage for CB-839, through 2032.

CB-839 may also have the potential to work in combination with immuno-oncology therapeutics. Inhibition of glutaminase results in accumulation of glutamine, the substrate of glutaminase, in tumors. Glutamine, which is frequently depleted in the tumor microenvironment due to avid uptake by tumor cells, has been shown to be an important nutrient for T-cell proliferation. Administration of CB-839 to tumor-bearing animals substantially enhances the anti-tumor activity of checkpoint inhibitors, potentially by restoring the levels of glutamine in the tumor microenvironment and thereby enabling T-cells to proliferate. Checkpoint inhibitors, including the approved agents nivolumab (marketed as Opdivo®) and pembrolizumab (marketed as Keytruda®), are a class of immuno-oncology agents directed against programmed death protein-1 (“PD-1”) or programmed death ligand-1 (“PD-L1”) that promote the activation and tumor-killing properties of the patient’s own immune cells, such as cytotoxic T-cells. CB-839 could potentially have multiple mechanisms of action in the treatment of cancer first by starving the tumor cell, and second by facilitating the activation of T-cells in the nutrient-deprived tumor microenvironment.

CB-1158 is a potent and selective orally bioavailable inhibitor of the enzyme arginase that was discovered at Calithera and is being co-developed with Incyte. Arginase depletes arginine, a nutrient that is critical for the activation and proliferation of the body’s cancer-fighting immune cells, such as cytotoxic T-cells and natural killer (“NK”)-cells. During normal activation of the immune system, arginase, which is expressed by myeloid immune cells known as myeloid-derived suppressor cells (“MDSCs”), plays an important role in halting T-cell proliferation. But in many tumors, including lung, gastrointestinal, bladder, renal cancer and acute myeloid leukemia, arginase-expressing myeloid cells accumulate and maintain an immunosuppressive environment, blocking the ability of T-cells and NK-cells to kill cancer cells. We believe that inhibitors of arginase can promote an anti-tumor immune response by restoring arginine levels, thereby allowing activation of the body’s own immune cells, including cytotoxic T-cells and NK-cells.

CB-839

Our lead product candidate, CB-839 is a potent, selective, reversible and orally bioavailable inhibitor of human glutaminase. CB-839 binds to a unique site on glutaminase that is distinct from the site that binds glutamine, thereby reducing the potential for undesirable side effects due to inhibition of other enzymes and receptors that bind glutamine. CB-839 takes advantage of the pronounced dependency many cancers have on the nutrient glutamine for growth and survival. In preclinical studies, CB-839 demonstrated broad antitumor activity in cell lines, inhibited the growth of human tumors in animal models, and was well tolerated in animals at doses above those shown to inhibit tumor growth. CB-839 was also synergistic with several approved cancer therapeutics that are part of the current standard of care.

Renal Cell Carcinoma

CB-839 is being developed for the treatment of patients with RCC. In 2017, RCC is estimated to be diagnosed in approximately 63,990 people in the United States, according to the National Cancer Institute. We evaluated CB-839 as a monotherapy in a RCC cohort in the dose expansion stage of our solid tumor Phase 1 clinical trial CX-839-001. As of December 31, 2016, 20 efficacy-evaluable RCC patients were treated with single agent CB-839 on the BID (twice-daily) dosing schedule. One patient achieved a partial response with a substantial decrease in target lesions (32%), including a dramatic improvement in the patient’s extensive lymphadenopathy. A total of 10 patients (50%) showed stable disease or better.

We are also evaluating CB-839 in expansion cohorts in combination with everolimus and cabozantinib. In November 2016, we presented data on 15 evaluable RCC patients, including 12 clear cell patients, and three papillary patients. Ninety-three percent (93%) of these patients had disease control (response or stable disease); one patient had a partial response, one patient had progressive disease, and 13 patients had stable disease. The median progression free survival was 8.5 months and for the majority of patients, their time on therapy is longer than their time on treatment in their prior therapy. In the clear cell patient population the disease control rate was 100% and eight patients remain on study. Patients enrolled in the trial had advanced or metastatic disease and had received a median of two prior treatments, which included tyrosine kinase inhibitors, mTOR inhibitors, and checkpoint inhibitors. Patients were administered CB-839 in oral doses that ranged from 400-800 mg twice a day in combination with a fixed oral dose of everolimus at 10 mg once a day. The addition of CB-839 to full-dose everolimus has been well tolerated, with a similar safety profile to the known profile of everolimus alone. Grade 3 events include two events of hyperglycemia and one event each of diarrhea, anemia and fatigue. We plan to present additional data from this trial in the first quarter of 2018. In addition, we continue to enroll patients in single arm cohort of patients dosed with CB-839 in combination with cabozantinib, with data expected in 2018.

In August 2017, we initiated CX-839-005, a Phase 2 randomized, double blind, placebo controlled trial designed to evaluate the safety and efficacy of CB-839 in combination with everolimus versus placebo with everolimus in approximately 250 patients with metastatic, clear cell RCC patients who have been treated with at least two prior lines of systemic therapy including a vascular endothelial growth factor receptor ("VEGFR")-targeting tyrosine kinase inhibitor and at least one of either cabozantinib or an active PD-1/PD-L1 inhibitor. Patients will be randomized in a 2:1 ratio. The primary endpoint is progression free survival assessed by an independent review committee; overall survival will be assessed as a secondary endpoint. The multicenter, international study will be conducted at multiple sites in the United States, Europe and Canada. The U.S. Food and Drug Administration ("FDA") has granted Fast Track designation to CB-839 in combination with everolimus, for the treatment of patients with metastatic RCC who have received 2 or more prior lines of therapy.

In August 2016, we initiated CX-839-004, a Phase 1/2 clinical trial of CB-839 in combination with the PD-1 inhibitor nivolumab in patients with RCC, melanoma, and non-small cell lung cancer. The Phase 1/2 study will assess the safety, pharmacokinetics and pharmacodynamics of CB-839 and nivolumab. The study will enroll patients who are either naïve to checkpoint inhibitors, had prior nivolumab therapy, or were recently treated with nivolumab without tumor response. Patients may be progressing on nivolumab or failing to respond and will receive CB-839 as an "add-on" therapy. In December 2016, we announced a clinical trial collaboration to evaluate Bristol-Myers Squibb's nivolumab in combination with CB-839 in two of the cohorts of patients with clear cell RCC. In May 2017, the collaboration with Bristol-Myers Squibb was expanded to include additional RCC cohorts as well as non-small cell lung cancer and melanoma (all study patients). We expect to present initial data from this trial in the fourth quarter of 2017.

Triple Negative Breast Cancer

In December 2016, we presented data on 28 TNBC patients treated with doses of CB-839 of 400, 600 or 800 mg BID in combination with 80 mg/m^2 IV paclitaxel, weekly, three weeks out of four; 23 were evaluable for response. The majority of patients had received at least three prior lines of therapy, with 43% of patients treated with five or more prior therapies in the advanced/metastatic setting. Most patients had received prior taxane therapy in either the neo-adjuvant or metastatic setting. Among evaluable patients treated with CB-839 doses of at least 600 mg BID (n=16), there are 5 partial responses (31%) and disease control in 11 patients (69%). In addition, the combination overcame resistance to paclitaxel in heavily pretreated TNBC patients. There was a 38% response rate and 50% disease control rate in patients who received prior taxanes in the metastatic setting. There was a 50% response rate among taxane-refractory African American patients. Four of five responding patients were African American. This is consistent with higher glutamine utilization observed in tumors from this population. CB-839 was well tolerated in combination with paclitaxel.

In July 2017, we initiated CX-839-007, a Phase 2 trial of CB-839 with paclitaxel in TNBC patients. Four single arm, open label, cohorts of African American and non-African American patients will be treated in both the early stage setting, where patients have no prior taxane treatment, as well as the late stage setting after prior taxane. The primary endpoint of this trial is objective response rate. We plan to present data from the TNBC development program in the fourth quarter of 2017, with additional data to be presented in 2018.

Colorectal Cancer

In 2017, an estimated 135,000 new cases of colorectal cancer ("CRC") will be diagnosed in the United States according to the American Cancer Society. Researchers report that PIK3CA mutation is present in 10% to 20% of all cases of CRC. An academic research group at Case Western demonstrated that single agent CB-839 inhibits the growth of CRCs with PIK3CA mutations in immunocompromised mice, but CRC tumors with a normal PIK3CA gene were not inhibited. Remarkably, the combination of CB-839 with 5-florouracil induced complete and long-lasting tumor regressions in animals bearing PIK3CA mutant CRC tumors, but not tumors with normal PIK3CA, suggesting that this combinational therapy may be a unique and effective approach in the clinic. In the third quarter of 2016, an investigator-sponsored clinical trial was initiated by Drs. Jennifer Eads, Alok Khorana, and Neal Meropol at the Case Western Comprehensive Cancer Center. Enrollment in this study is ongoing.

CB-1158

Our second product candidate, CB-1158, is a first-in-class immuno-oncology metabolic checkpoint inhibitor targeting arginase, an immunosuppressive enzyme in myeloid-derived suppressor cells ("MDSCs"), responsible for T-cell suppression. Significant infiltration by arginase-expressing myeloid cells has been observed in many solid tumor types including lung, colorectal esophageal, bladder, head and neck, kidney cancer, and other tumor types. We have confirmed that arginase-expressing MDSCs are found by immunohistochemistry in a wide range of tumor types including non-small cell lung (both adenocarcinoma and squamous types), gastrointestinal and bladder cancers. CB-1158 is being co-developed with Incyte.

CB-1158 entered clinical trials in September 2016, and is currently being tested in a Phase 1 clinical trial in patients with solid tumors. We presented data in June 2017 at the American Society of Clinical Oncology ("ASCO") annual meeting. As of the data cut off of April 24, 2017, a total of 17 patients with advanced solid tumors had received single agent doses ranging from 50 to 150 mg twice a day ("BID") in the ongoing Phase 1 trial. CB-1158 was generally well tolerated with no drug-related serious adverse events. Treatment related adverse events were limited to one case each of Grade 1 anemia, fatigue, increased ALT and myalgia. No Grade 3 treatment-related adverse events were reported. Reversible, asymptomatic elevations of urinary orotic acid, a highly sensitive marker of urea cycle inhibition, were observed in two patients at 150 mg BID. Plasma levels of arginase were inhibited > 90% in all patients, and in 10 of 11 patients plasma arginine increased 1.5-fold or more. The pharmacokinetics support BID dosing of CB 1158, as currently tested doses continuously maintained targeted levels of arginase inhibition. The trial is continuing to enroll patients in the dose escalation phase of the study, and expansion cohorts in pre-defined tumor types, to be followed by combination studies with an anti-PD-1 antibody.

In January 2017, we entered into a global collaboration and license agreement for the research, development and commercialization of our small molecule arginase inhibitor CB-1158 in hematology and oncology with Incyte. We are collaborating with Incyte on and co-funding the development of CB-1158 for oncology and hematology indications. Incyte bears 70% and we bear 30% of global development costs, unless we opt out of development co-funding. We have the right to conduct a portion of clinical development studies under the collaboration, including combination studies of a licensed product with any other of our proprietary compounds. If we do not opt out of development co-funding, the parties will share profits and losses in the United States, with 60% to Incyte and 40% to us, and we have the right to co-detail licensed products in the United States. We retain the rights to certain arginase inhibitors for specific indications outside of hematology and oncology. In the first quarter of 2017 Incyte paid us an upfront license fee of $45.0 million and in March 2017, we achieved a development milestone of $12.0 million for which we received payment in May of 2017. Incyte may pay potential development, regulatory and sales milestone payments up to an additional $418.0 million if the profit share is in effect, or an additional $738.0 million if the profit share terminates.

Critical Accounting Policies and Estimates

Revenue Recognition

We recognize revenue from collaboration, license or research arrangements when persuasive evidence of an arrangement exists; transfer of technology has been completed, services are performed or products have been delivered; the fee is fixed or determinable; and collection is reasonably assured. For arrangements with multiple deliverables, we evaluate each deliverable to determine whether it qualifies as a separate unit of accounting. This determination is based on whether the deliverable has stand-alone value to the customer. If we determine that the deliverables do not have stand-alone value then all such deliverables are combined into one or more units of accounting, with consideration given to whether one deliverable is considered the predominant deliverable under the arrangement.

The selling price used for each unit of accounting will be based on vendor-specific objective evidence, if available, third-party evidence if vendor-specific objective evidence is not available or estimated selling price if neither vendor-specific nor third-party evidence is available. Management may be required to exercise considerable judgment in determining whether a deliverable is a separate unit of accounting and in estimating the selling prices of identified units of accounting for new agreements. Where multiple deliverables are combined as a single unit of accounting, revenues are recognized based on the performance requirements of the related agreement.

For a combined unit of accounting, non-refundable upfront payments are recognized in a manner consistent with the final deliverable, which has generally been ratably over the estimated period of continued involvement. We periodically review the basis for our estimates, and we may change the estimates if circumstances change. These changes can significantly change the timing of revenue recognized. Amounts received in advance of performance are recorded as deferred revenue. Upfront payments are classified as collaboration revenue in our statements of operations.

We have not made a policy election to use the milestone method of accounting. Instead, we will account for milestone payments over the remaining period of performance for the combined unit of account. Therefore, the development and commercial milestones, if and when achieved, will be recorded as revenue over the period of performance for the combined unit of account. If there are no remaining performance obligations, milestone payments will be recognized when the event is achieved and the applicable revenue criteria are met.

For a discussion of our other significant accounting policies, please see our Annual Report on Form 10-K for the fiscal year ended December 31, 2016. Except for our revenue recognition policy, there have been no material changes in our critical accounting policies during the six months ended June 30, 2017, as compared to those disclosed in the Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates” in our Form 10-K dated December 31, 2016, filed with the SEC.

Financial Overview

Collaboration Revenue

Collaboration revenue represents the portion of deferred revenue recognized from a $45.0 million upfront fee and $12.0 million milestone achieved from the Incyte Collaboration Agreement. The upfront payment of $45.0 million is being recognized over the estimated two-year period of performance under the Incyte Collaboration Agreement, ending in January 2019. In the first quarter of 2017, we earned a $12.0 million developmental milestone payment from Incyte, which is being recognized as revenue over the remaining period of performance for the combined unit of accounting.

Research and Development Expenses

Research and development expenses represent costs incurred to conduct research, such as the discovery and development of our product candidates. We recognize all research and development costs as they are incurred. Net costs associated with co-development activities performed under the Incyte Collaboration Agreement are included in research and development expenses, with any reimbursement of costs by Incyte reflected as a reduction of such expenses.

Research and development expenses consist primarily of the following:

- employee-related expenses, which include salaries, benefits and stock-based compensation;
- expenses incurred under agreements with clinical trial sites that conduct research and development activities on our behalf;
- laboratory and vendor expenses related to the execution of preclinical studies and clinical trials;
- contract manufacturing expenses, primarily for the production of clinical supplies;
- facilities and other allocated expenses, which include direct and allocated expenses for rent and maintenance of facilities, depreciation and amortization expense and other supplies; and
- license fees and milestone payments related to our licensing agreements.

The largest component of our total operating expenses has historically been our investment in research and development activities including the clinical development of our product candidates. We allocate to research and development expenses the salaries, benefits, stock-based compensation expense, and indirect costs of our clinical and preclinical programs on a program-specific basis, and we include these costs in the program-specific expenses. The following table shows our research and development expenses for the three and six months ended June 30, 2017 and 2016:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
	(in thousands)			
Development:				
CB-839 (Glutaminase inhibitor)	$7,400	$3,101	$11,026	$5,646
CB-1158 (Arginase inhibitor)	1,026	3,678	2,450	7,186
Total development	8,426	6,779	13,476	12,832
Preclinical and research:				
Arginase inhibitors	—	—	—	722
Other preclinical and research	1,716	997	3,306	1,288
Total preclinical and research	1,716	997	3,306	2,010
Total Research and Development	$10,142	$7,776	$16,782	$14,842

We expect our research and development expenses will increase during the next few years as we advance our product candidates into and through clinical trials, and pursue regulatory approval of our product candidates, which will require a significant investment in contract manufacturing and inventory build-up related costs.

The process of conducting clinical trials necessary to obtain regulatory approval is costly and time consuming. We may never succeed in achieving marketing approval for our product candidates. The probability of success of our product candidates may be affected by numerous factors, including clinical data, competition, manufacturing capability and commercial viability. As a result, we are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will generate revenue from the commercialization and sale of any of our product candidates.

General and Administrative Expenses

General and administrative expenses consist of personnel costs, allocated expenses and other expenses for outside professional services, including legal, audit and accounting services. Personnel costs consist of salaries, benefits and stock-based compensation. Allocated expenses consist of facilities and other allocated expenses, which include direct and allocated expenses for rent and maintenance of facilities, depreciation and amortization expense and other supplies. We have incurred, and expect to continue to incur, additional expenses as a result of operating as a public company, including costs to comply with the rules and regulations applicable to companies listed on a national securities exchange and costs related to compliance and reporting obligations pursuant to the rules and regulations of the SEC, particularly after we cease to be an “emerging growth company.”

Results of Operations

Comparison of the Three Months Ended June 30, 2017 and 2016

	Three Months Ended June 30,		Change	
	2017	2016	$	%
	(in thousands, except percentages)			
Revenue:				
Collaboration revenue	$7,255	$—	$7,255	*
Total revenue	7,255	—	7,255	*
Operating expenses:				
Research and development	10,142	7,776	2,366	30 %
General and administrative	2,848	2,665	183	7 %
Total operating expenses	12,990	10,441	2,549	24 %
Loss from operations	(5,735)	(10,441)	4,706	-45 %
Interest income, net	541	83	458	552%
Net loss	$(5,194)	$(10,358)	$5,164	-50 %

*Percentage not meaningful.

Collaboration Revenue. Collaboration revenue increased $7.3 million for the three months ended June 30, 2017 and represents the portion of deferred revenue from the $45.0 million upfront fee and $12.0 million milestone achieved in the first quarter of 2017 from the Incyte Collaboration Agreement recognized ratably over the estimated performance period that is consistent with the term of our obligations under the agreement.

Research and Development. Research and development expenses increased $2.3 million, or 30%, from $7.8 million for the three months ended June 30, 2016 to $10.1 million for the three months ended June 30, 2017. The increase of $2.3 million was primarily due to a $4.3 million increase in the CB-839 program including for Phase 2 start-up activities as well as an increase of $0.7 million from investment in our early stage research programs, partially offset by a decrease of $2.7 million from the CB-1158 program including $2.1 million from Incyte's co-funding of development costs pursuant to the Incyte Collaboration Agreement.

General and Administrative. General and administrative expenses increased $0.1 million, or 7%, from $2.7 million for the three months ended June 30, 2016 to $2.8 million for the three months ended June 30, 2017. The increase of $0.1 million was primarily due to increases in professional services and higher personnel-related costs.

Interest Income. Interest income increased $0.4 million, from $0.1 million for the three months ended June 30, 2016 to $0.5 million for the three months ended June 30, 2017. The increase of $0.4 million was primarily due to higher interest income generated from higher returns on our investments and higher cash equivalents and investment balances compared to the same period in the prior year.

Comparison of the Six Months Ended June 30, 2017 and 2016

	Six Months Ended June 30,		Change	
	2017	2016	$	%
	(in thousands, except percentages)			
Revenue:				
Collaboration revenue	$11,447	$—	$11,447	*
Total revenue	11,447	—	11,447	*
Operating expenses:				
Research and development	16,782	14,842	1,940	13 %
General and administrative	6,156	5,256	900	17 %
Total operating expenses	22,938	20,098	2,840	14 %
Loss from operations	(11,491)	(20,098)	8,607	-43 %
Other income, net	710	158	552	349%
Net loss	$(10,781)	$(19,940)	$9,159	-46 %

*Percentage not meaningful.

Collaboration Revenue. Collaboration revenue increased $11.4 million for the six months ended June 30, 2017 and represents the portion of deferred revenue from the $45.0 million upfront fee and $12.0 million milestone achieved in the first quarter of 2017 from the Incyte Collaboration Agreement recognized ratably over the estimated performance period that is consistent with the term of our obligations under the agreement.

Research and Development. Research and development expenses increased $1.9 million, or 13%, from $14.8 million for the six months ended June 30, 2016 to $16.7 million for the six months ended June 30, 2017. The increase of $1.9 million was primarily due to a $5.4 million increase in the CB-839 program including for Phase 2 start-up activities as well an increase of $2.0 million from investment in our early stage research programs, partially offset by a decrease of $5.5 million from the CB-1158 program including $3.6 million from Incyte's co-funding of development costs pursuant to the Incyte Collaboration Agreement.

General and Administrative. General and administrative expenses increased $0.9 million, or 17%, from $5.3 million for the six months ended June 30, 2016 to $6.2 million for the six months ended June 30, 2017. The increase was due to an increase of $0.6 million in professional services primarily related to legal expenses in connection with the Incyte Collaboration Agreement and an increase of $0.3 million primarily related to non-recurring expenses for the sublease of our office and laboratory space in March 2017.

Interest Income. Interest income increased $0.5 million, from $0.2 million for the six months ended June 30, 2016 to $0.7 million for the six months ended June 30, 2017. The increase of $0.5 million was primarily due to higher interest income generated from higher returns on our investments and higher cash equivalents and investment balances compared to the same period in the prior year.

Liquidity and Capital Resources

As of June 30, 2017, we had cash, cash equivalents and investments of $208.2 million. Our operations have been financed by net proceeds from the sale of shares of our capital stock and revenue from the Incyte Collaboration Agreement.

In November 2015, we filed a shelf registration statement on Form S-3 with the Securities and Exchange Commission which permits the offering, issuance and sale by us of up to a maximum aggregate offering price of $150.0 million of our common stock. Up to $50.0 million of the maximum aggregate offering price of $150.0 million may be issued and sold pursuant to an at-the-market offering program (“ATM”) for sales of our common stock under a sales agreement with Cowen and Company, LLC (“Cowen”), our placement agent. During the six months ended June 30, 2017, we sold an aggregate of:

- 7,854,500 shares of common stock pursuant to an underwriting agreement with Leerink Partners LLC as representative of the several underwriters at a public offering price of $10.25 per share for gross proceeds of $80.5 million, resulting in net proceeds of $75.4 million after deducting underwriting fees and offering expenses.

- 4,188,679 shares of common stock pursuant to our ATM offering program with Cowen, at an average price of approximately $9.06 per share for gross proceeds of $38.0 million, resulting in net proceeds of $36.9 million after deducting underwriting fees and offering expenses; and
- 1,720,430 shares of common stock pursuant to our stock purchase agreement with Incyte, at a price of $4.65 per share for gross proceeds of $8.0 million, resulting in net proceeds of $7.9 million after deducting offering expenses.

As of June 30, 2017, approximately $11.5 million of our common stock remained available for sale pursuant to the shelf registration statement. In addition, as of June 30, 2017, we had sold all available shares of common stock under our November 2015 ATM program.

Our primary uses of cash are to fund operating expenses, primarily research and development expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable and accrued expenses.

We believe that our existing cash, cash equivalents and investments as of June 30, 2017 will be sufficient for us to meet our current operating plan through 2020. However, our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially. In order to complete the process of obtaining regulatory approval for our product candidates and to build the sales, marketing and distribution infrastructure that we believe will be necessary to commercialize our product candidates, if approved, we will require substantial additional funding.

We have based our projections of operating capital requirements on assumptions that may prove to be incorrect and we may use all of our available capital resources sooner than we expect. Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical products, we are unable to estimate the exact amount of our operating capital requirements. Our future funding requirements will depend on many factors, including, but not limited to:

- the timing and costs of our planned clinical trials for our product candidates;
- the timing and costs of our planned preclinical studies of our product candidates;
- our success in establishing and scaling commercial manufacturing capabilities;
- the number and characteristics of product candidates that we pursue;
- the outcome, timing and costs of seeking regulatory approvals;
- subject to receipt of regulatory approval, revenue received from commercial sales of our product candidates;
- the terms and timing of any future collaborations, licensing, consulting or other arrangements that we may establish;
- the amount and timing of any payments we may be required to make in connection with the licensing, filing, prosecution, maintenance, defense and enforcement of any patents or patent applications or other intellectual property rights; and
- the extent to which we in-license or acquire other products and technologies.

We plan to continue to fund our operations and capital funding needs through reimbursement of expenses under our collaboration agreement with Incyte, and through equity and/or debt financing. We may also consider further collaborations or selectively partnering for clinical development and commercialization. The sale of additional equity would result in additional dilution to our stockholders. The incurrence of debt financing would result in debt service obligations and the instruments governing such debt could provide for operating and financing covenants that would restrict our operations. 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 harm our business, results of operations and future prospects.

Cash Flows

The following table summarizes our cash flows for the periods indicated:

	Six Months Ended June 30,	
	2017	2016
	(in thousands)	
Cash provided by (used in) operating activities	$36,419	$(15,248)
Cash provided by (used in) investing activities	$(109,980)	$12,299
Cash provided by financing activities	$120,957	$4,170

Cash Flows Provided By (Used In) Operating Activities

Cash provided by operating activities for the six months ended June 30, 2017 was $36.4 million. Our net loss of $10.8 million was offset in part by non-cash charges of $2.5 million of stock-based compensation and $0.4 million for depreciation and amortization. The change in operating assets and liabilities was primarily related to a $45.6 million increase in deferred revenue and a $1.0 million increase primarily due to the timing of payments for our research and development activities, offset by a $2.3 million increase in the receivable related to the Incyte Collaboration Agreement.

Cash used in operating activities for the six months ended June 30, 2016 was $15.2 million. Our net loss of $19.9 million was offset in part by non-cash charges of $2.1 million of stock-based compensation and $0.5 million for depreciation and amortization. The change in operating assets and liabilities of $2.1 million was primarily due to the timing of payments for our research and development activities.

Cash Flows Provided By (Used In) Investing Activities

Cash used in investing activities was $110.0 million for the six months ended June 30, 2017 and was related to the purchases of investments of $146.3 million offset by the sale or maturity of investments of $36.9 million, an increase in restricted cash of $0.4 million, and purchase of property and equipment of $0.2 million.

Cash provided by investing activities was $12.3 million for the six months ended June 30, 2016 and was related to the sale or maturity of investments of $36.6 million, offset by purchase of investments of $24.1 million and purchase of property and equipment of $0.2 million.

Cash Flows Provided By Financing Activities

Cash provided by financing activities was $121.0 million for the six months ended June 30, 2017 and was related to $75.4 million in net proceeds from the sale and issuance of common stock related to our public offering, $7.9 million in net proceeds from the issuance of common stock under our stock purchase agreement with Incyte, $36.9 million in net proceeds from the issuance of common stock through our ATM program, and issuance of common stock upon the exercise of stock options and employee stock plan purchases of $0.8 million.

Cash provided by financing activities was $4.2 million for the six months ended June 30, 2016 and was related to net proceeds from the issuance of common stock through our ATM program of $4.0 million and issuance of common stock upon the exercise of stock options and employee stock plan purchases of $0.2 million.

Contractual Obligations and Other Commitments

There have been no material changes to the contractual obligations during the six months ended June 30, 2017, as compared to those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016.

Off-Balance Sheet Arrangements

During 2016 and the six months ended June 30, 2017, we did not have any off balance sheet arrangements.

Recent Accounting Pronouncements

Please refer to Note 1 to our unaudited condensed consolidated financial statements appearing under Part I, Item 1 for a discussion of new accounting standards updates that may impact us.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate sensitivities. Our investment policy allows us to maintain a portfolio of cash equivalents and investments in a variety of high credit quality securities issued by the U.S. government, U.S. government-sponsored agencies and highly rated banks and corporations, subject to certain concentration limits. Our investment policy prohibits us from holding auction rate securities or derivative financial instruments. As of June 30, 2017, we had cash, cash equivalents and investments of $208.2 million. A portion of our investments may be subject to interest rate risk and could fall in value if market interest rates increase. However, we believe that our exposure to interest rate risk is not significant as the majority of our investments are short-term in duration and due to the low risk profile of our investments, a 1% change in interest rates would not have a material impact on the total market value of our portfolio. We have the ability to hold our short-term investments until maturity, and therefore we do not expect that our results of operations or cash flows would be adversely affected by any change in market interest rates on our investments. We actively monitor changes in interest rates. We had no outstanding debt as of June 30, 2017.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures.

As of June 30, 2017, management, with the participation of our President and Chief Executive Officer (“Principal Executive Officer and Principal Financial Officer”), performed an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms, and that such information is accumulated and communicated to our management, including the Chief Executive Officer to allow timely decisions regarding required disclosures.

Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on this evaluation, our President and Chief Executive Officer concluded that, as of June 30, 2017, the design and operation of our disclosure controls and procedures were effective at a reasonable assurance level.

Changes in Internal Control Over Financial Reporting.

There were no changes in our internal control over financial reporting during the three months ended June 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. – OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we may become involved in legal proceedings relating to claims arising from the ordinary course of business. Our management believes that there are currently no claims or actions pending against us, the ultimate disposition of which could have a material adverse effect on our results of operations, financial condition or cash flows.

Item 1A. Risk Factors

Our business involves significant risks, some of which are described below. You should carefully consider the following risk factors, in addition to the other information contained in this report on Form 10-Q, including our financial statements and related notes and the section of this report titled "Management's Discussion and Analysis of Financial Condition and Results of Operations". The occurrence of any of the events or developments described in the following risk factors and the risks described elsewhere in this report could harm our business, financial condition, results of operations, cash flows, the trading price of our common stock and our growth prospects. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. This report on Form 10-Q also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of factors that are described below and elsewhere in this report. The risks relating to our business set forth in our Annual Report on Form 10-K, filed with the SEC, are set forth below and are unchanged substantively as of June 30, 2017, except for those risks designated by an asterisk (*).

Risks Related to Our Financial Position and Need For Additional Capital

We have incurred significant operating losses since our inception and anticipate that we will continue to incur substantial operating losses for the foreseeable future. We may never achieve or maintain profitability.*

Since our inception, we have incurred significant operating losses. Our net loss was $38.0 million and $10.8 million for year ended December 31, 2016 and the six months ended June 30, 2017, respectively. As of June 30, 2017, we had an accumulated deficit of $133.3 million. To date, we have financed our operations primarily through sales of our capital stock and payments from the Incyte Collaboration Agreement. We have devoted substantially all of our financial resources and efforts to research and development. We expect that it will be many years, if ever, before we receive regulatory approval and have a product candidate ready for commercialization. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. Our net losses may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase substantially if and as we:

- advance further into clinical trials for our existing clinical product candidates, CB-839 and CB-1158;
- continue the preclinical development of our research programs and advance candidates into clinical trials;
- identify additional product candidates and advance them into preclinical development;
- pursue regulatory approval of product candidates;
- seek marketing approvals for our product candidates that successfully complete clinical trials;
- establish a sales, marketing and distribution infrastructure to commercialize any product candidates for which we obtain marketing approval;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, regulatory and scientific personnel;
-

- add operational, financial and management information systems and personnel, including personnel to support product development;
- acquire or in-license other product candidates and technologies; and
- operate as a public company.

We have never generated any revenue from product sales and may never be profitable. To become and remain profitable, we and our collaborators must develop and eventually commercialize one or more products with significant market potential. This will require us to be successful in a range of challenging activities, including completing preclinical studies and clinical trials of our product candidates, obtaining marketing approval for these product candidates, manufacturing, marketing and selling those product candidates for which we may obtain marketing approval, and satisfying any post-marketing requirements. We may never succeed in these activities and, even if we do, may never generate revenue that is significant or large enough to achieve profitability. Our failure to become and remain profitable would decrease the value of the company and could impair our ability to raise capital, maintain our research and development efforts, expand our business or continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

We will need substantial additional funding. If we are unable to raise capital when needed, we would be forced to delay, reduce or eliminate our product development programs or commercialization efforts.

We expect our expenses to increase in connection with our ongoing activities, particularly as we continue the research and development of, continue and initiate clinical trials of and seek marketing approval for our product candidates, specifically CB-839 and CB-1158, and as we become obligated to make milestone payments pursuant to our outstanding license agreements. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution of the approved product.

Our future capital requirements will depend on many factors, including:

- the scope, progress, results and costs of drug discovery, clinical development, laboratory testing and clinical trials for our product candidates, in particular CB-839 and CB-1158;
- the costs, timing and outcome of any regulatory review of our product candidates, CB-839 and CB-1158;
- the cost of any other product programs we pursue;
- the costs and timing of commercialization activities, including manufacturing, marketing, sales and distribution, for any product candidates that receive marketing approval;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- achieving the milestones set forth in the Incyte Collaboration Agreement;
- our ability to establish and maintain collaborations on favorable terms, if at all; and
- the extent to which we acquire or in-license other product candidates and technologies.

Identifying potential product candidates and conducting preclinical studies and clinical trials are time consuming, expensive and uncertain processes that take years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales for any of our current or future product candidates. In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenue, if any, will be derived from sales of products that we do not expect to be commercially available for many years, if at all.

We do not have any material committed external source of funds or other support for our development efforts other than the Incyte Collaboration Agreement for the development and commercialization of small molecule arginase inhibitors in hematology and oncology indications, including CB-1158, which agreement is terminable by Incyte for convenience or following our uncured breach. If Incyte terminates our collaboration agreement, we would need to obtain substantial additional sources of funding to develop CB-1158 as currently contemplated. If such additional funding is not available on favorable terms or at all, we may need to delay or reduce the scope of our CB-1158 development program or dedicate resources allocated to other programs to fund CB-1158. We may also need to grant rights in the United States, as well as outside the United States, to CB-1158 to one or more partners.

Accordingly, we will need substantial additional funding in connection with our continuing operations and to achieve our goals. We expect that our existing cash, cash equivalents, and investments will be sufficient to enable us to meet our current operating plan for at least the next 12 months. However, our existing cash, cash equivalents and investments may prove to be insufficient for these activities. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts. Adequate additional financing may not be available to us on acceptable terms, or at all. In addition, we may seek additional financing due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our operating plans.

Raising additional capital may cause dilution to our stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity and debt financings, as well as entering into new collaborations, strategic alliances and licensing arrangements. We do not have any committed external source of funds, other than our collaborations, which are limited in scope and duration. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends, and may be secured by all or a portion of our assets. If we raise funds by entering into new collaborations, strategic alliances or licensing arrangements in the future with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or through collaborations, strategic alliances or licensing arrangements when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Our short operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.*

We were founded in March 2010 and our operations to date have been limited to organizing and staffing our company, business planning, raising capital, developing our technology, identifying potential product candidates, undertaking preclinical studies and commencing Phase 1 clinical trials of our product candidate. CB-839 and CB-1158 are currently being evaluated in Phase 1/2 and Phase 1 clinical trials, respectively. All of our other programs are in research and preclinical development. We have not yet demonstrated our ability to successfully complete any clinical trials, including large-scale, pivotal clinical trials required for regulatory approval of our product candidates, obtain marketing approvals, manufacture a commercial scale product, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful commercialization. Typically, it takes many years to develop one new product from the time it is discovered to when it is commercially available. Consequently, any predictions made about our future success or viability may not be as accurate as they could be if we had a longer operating history or if we had product candidates in advanced clinical trials.

In addition, as a new business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors that may alter or delay our plans. We will need to transition from a company with a research focus to a company capable of supporting development activities and, if a product candidate is approved, a company with commercial activities. We may not be successful in any step in such a transition.

Risks Related to Drug Discovery, Development and Commercialization

Our approach to the discovery and development of product candidates that target tumor metabolism and tumor immunology is unproven and may never lead to marketable products.

Our scientific approach focuses on using our understanding of cellular metabolic pathways and the role of glutaminase and hexokinase in these pathways, as well as the role of arginase in the anti-tumor immune response, to identify molecules that are potentially promising as therapies for cancer indications. Any product candidates we develop may not effectively modulate metabolic or immunology pathways. The scientific evidence to support the feasibility of developing product candidates based on inhibiting tumor metabolism or impacting the anti-tumor immune response are both preliminary and limited. Although preclinical studies suggest that inhibiting glutaminase and hexokinase can suppress the growth of certain cancer cells, to date no company has translated this mechanism into a drug that has received marketing approval. Even if we are able to develop a product candidate in preclinical studies, we may not succeed in demonstrating the safety and efficacy of the product candidate in human clinical trials. Our expertise in cellular metabolic pathways, the role of glutaminase and hexokinase in these pathways, and the role of arginase in the anti-tumor immune response may not result in the discovery and development of commercially viable products to treat cancer.

We are very early in our development efforts, which may not be successful.*

We have invested a significant portion of our efforts and financial resources in the identification of our most advanced product candidates, CB-839 and CB-1158, which are being evaluated in Phase 1/2 and Phase 1 clinical trials, respectively. We have entered into the Incyte Collaboration Agreement for the development and commercialization of CB-1158. Pursuant to our agreement, we collaborate on and co-fund the development of CB-1158 for hematology and oncology indications, with Incyte bearing 70% and Calithera bearing 30% of global development costs. All of our other programs are in research and preclinical development. It is also too early in our development efforts to determine whether our product candidates will demonstrate single-agent activity or will be developed for use in combination with other approved therapies, or both. As a result, the timing and costs of the regulatory paths we will follow and marketing approvals remain uncertain. Our ability to generate product revenue, which we do not expect will occur for many years, if ever, will depend heavily on the successful development and eventual commercialization of CB-839 and CB-1158. The success of CB-839, CB-1158 and any other product candidates we may develop will depend on many factors, including the following:

- successful enrollment in, and completion of, clinical trials;
- demonstrating safety and efficacy;
- receipt of marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and non-patent exclusivity for our product candidates;

- launching commercial sales of the product candidates, if and when approved, whether alone or selectively in collaboration with others;
- our ability to successfully develop and commercialize small molecule arginase inhibitors, including CB-1158 with Incyte;
- acceptance of the product candidates, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- a continued acceptable safety profile of the products following approval;
- enforcing and defending intellectual property rights and claims; and
- other legal, regulatory, compliance and fraud and abuse matters.

If we do not accomplish one or more of these goals in a timely manner, or at all, we could experience significant delays or an inability to successfully commercialize our product candidates, which would harm our business.

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

Our drug discovery efforts may not be successful in identifying compounds that are useful in treating cancer. Our research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development for a number of reasons. In particular, our research methodology used may not be successful in identifying compounds with sufficient potency or bioavailability to be potential product candidates. In addition, our potential product candidates may, on further study, be shown to have harmful side effects or other negative characteristics.

Research programs to identify new product candidates require substantial technical, financial and human resources. We may choose to focus our efforts and resources on potential product candidates that ultimately prove to be unsuccessful. If we are unable to identify suitable compounds for preclinical and clinical development, we will not be able to generate product revenue, which would harm our financial position and adversely impact our stock price.

If clinical trials of our product candidates fail to demonstrate safety and efficacy to the satisfaction of regulatory authorities or do not otherwise produce positive results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must complete preclinical development and in the case of CB-1158, together with Incyte, then conduct extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more clinical trials could occur at any stage of testing. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a particular clinical trial do not necessarily predict final results of that trial.

Moreover, preclinical and clinical data are often susceptible to multiple interpretations and analyses. Many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their products.

We may experience numerous unforeseen events during, or as a result of, preclinical testing or clinical trials that could delay or prevent our ability to receive marketing approval or commercialize our product candidates, including that:

- regulators or institutional review boards may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may have delays in reaching or fail to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;
-

clinical trials of our product candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;

- the number of patients required for clinical trials of our product candidates may be larger than we anticipate;

enrollment in these clinical trials may be slower than we anticipate, or participants may drop out of these clinical trials at a higher rate than we anticipate;

- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- regulators or institutional review boards may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;
- the cost of clinical trials of our product candidates may be greater than we anticipate; and
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate.

If we are required to conduct additional clinical trials or other testing of our product candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- be delayed in obtaining marketing approval for our product candidates;
- not obtain marketing approval at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings, including boxed warnings;
- be subject to additional post-marketing testing requirements; or
- have the product removed from the market after obtaining marketing approval.

Product development costs will also increase if we experience delays in testing or in receiving marketing approvals. We do not know whether any clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates, could allow our competitors to bring products to market before we do, and could impair our ability to successfully commercialize our product candidates, any of which may harm our business and results of operations.

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

We may not be able to initiate or continue clinical trials for our product candidates if we are unable to identify and enroll a sufficient number of eligible patients to participate in these trials as required by the U.S. Food and Drug Administration (“FDA”) or analogous regulatory authorities outside the United States. In addition, some of our competitors may have ongoing clinical trials for product candidates that would treat the same indications as our product candidates, and patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors’ product candidates. Patient enrollment is also affected by other factors, including:

- severity of the disease under investigation;
- availability and efficacy of approved medications for the disease under investigation;
- eligibility criteria for the trial in question;
- perceived risks and benefits of the product candidate under study;
- efforts to facilitate timely enrollment in clinical trials;
- patient referral practices of health care professionals;
- the ability to monitor patients adequately during and after treatment; and
- proximity and availability of clinical trial sites for prospective patients.

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

If serious adverse effects or unexpected characteristics of our product candidates are identified during development, we may need to abandon or limit our development of some or all of our product candidates.*

We are currently evaluating CB-839 and CB-1158 in Phase 1/2 and Phase 1 clinical trials, respectively. All our other programs are in research and preclinical development and their risk of failure is high. It is impossible to predict when or if any of our product candidates will prove effective or safe in humans or will receive marketing approval. Adverse events or undesirable side effects caused by, or other unexpected properties of, our product candidates could cause us, any current or future collaborators, an institutional review board or regulatory authorities to interrupt, delay or halt clinical trials of one or more of our product candidates and could result in a more restrictive label, or the delay or denial of marketing approval by the FDA or comparable foreign regulatory authorities. If adverse effects were to arise in patients being treated with any of our product candidates, it could require us to halt, delay or interrupt clinical trials of such product candidate or adversely affect our ability to obtain requisite approvals to advance the development and commercialization of such product candidate. If our product candidates are associated with undesirable side effects or have characteristics that are unexpected, we may need to abandon their development or limit development to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. Many agents that initially showed promise in early stage testing for treating cancer or other diseases have later been found to cause side effects that prevented further development of the agent.

We are in early clinical trials with CB-839 and CB-1158 and we have seen several adverse events ("AEs") deemed possibly or probably related to study drug in each of those programs. For example, in the CB-839-001 study, treatment-emergent Grade ≥ 3 AEs occurring in >5% of patients included increases in liver enzymes aspartate aminotransferase ("AST") and alanine aminotransferase ("ALT"). With a change to twice daily dosing with food, only one out of the 66 patients showed a Grade 3 liver enzyme increase. We have treated an insufficient number of patients to fully assess the safety of CB-839 and CB-1158 and, as these trials progress, we may experience frequent or severe adverse events. Our ongoing and planned trials for CB-839 and our and Incyte's ongoing and planned trials for CB-1158 may fail due to safety issues, and we may need to abandon development of CB-839 or CB-1158. Our other research programs may fail due to preclinical or clinical safety issues, causing us to abandon or delay the development of a product candidate from these programs.

Results of preclinical studies and early clinical trials may not be predictive of results of future clinical trials.

The outcome of preclinical studies and early clinical trials may not be predictive of the success of later clinical trials, and interim results of clinical trials do not necessarily predict success in future clinical trials. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials after achieving positive results in earlier development, and we could face similar setbacks. The design of a clinical trial can determine whether its results will support approval of a product and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. We may experience delays in designing and executing clinical trials to support marketing approval. In addition, preclinical and clinical data are often susceptible to varying interpretations and analyses. Many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval for the product candidates. Even if we, or our current and future collaborators, believe that the results of clinical trials for our product candidates warrant marketing approval, the FDA or comparable foreign regulatory authorities may disagree and may not grant marketing approval of our product candidates.

In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial participants. If we fail to receive positive results in clinical trials of our product candidates, the development timeline and regulatory approval and commercialization prospects for our most advanced product candidates, and, correspondingly, our business and financial prospects would be negatively impacted.

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

We have limited financial and managerial resources. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications 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 products. 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, including our agreement with Incyte, in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate. In addition, under our agreement with Incyte, Incyte has the right to commercialize CB-1158 in hematology and oncology indications. If Incyte does not successfully commercialize CB-1158, we may be unable to realize the full value from our collaboration with Incyte.

Even if any of our product candidates receives marketing approval, we or others may later discover that the product is less effective than previously believed or causes undesirable side effects that were not previously identified, which could compromise our ability, or that of any future collaborators, to market the product.*

Clinical trials of our product candidates are conducted in carefully defined sets of patients who have agreed to enter into clinical trials. Consequently, it is possible that our clinical trials, or those of any future collaborator, may indicate an apparent positive effect of a product candidate that is greater than the actual positive effect, if any, or alternatively fail to identify undesirable side effects. If, following approval of a product candidate, we, or others, discover that the product is less effective than previously believed or causes undesirable side effects that were not previously identified, any of the following adverse events could occur:

- regulatory authorities may withdraw their approval of the product or seize the product;
- we, or any future collaborators, may be required to recall the product, change the way the product is administered or conduct additional clinical trials;
- additional restrictions may be imposed on the marketing of, or the manufacturing processes for, the particular product;
- regulatory authorities may require the addition of labeling statements, such as a “black box” warning or a contraindication;
- we, or any future collaborators, may be required to create a Medication Guide outlining the risks of the previously unidentified side effects for distribution to patients;
- we, or any future collaborators, could be sued and held liable for harm caused to patients;
- the product may become less competitive; and
- our reputation may suffer.

Even if any of our product candidates receive marketing approval, they may fail to achieve the degree of market acceptance by health care professionals, patients, third party payors and others in the medical community necessary for commercial success.

If any of our product candidates receive marketing approval, they may nonetheless fail to gain sufficient market acceptance by health care professionals, patients, third party payors and others in the medical community for us to achieve commercial success. For example, current cancer treatments like chemotherapy and radiation therapy for certain diseases and conditions are well established in the medical community, and doctors may continue to rely on these treatments. If our product candidates do not achieve an adequate level of acceptance, we may not generate significant product revenue to become profitable. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and potential advantages compared to alternative treatments;
- our ability to offer any approved products for sale at competitive prices;
- convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of health care professionals to prescribe these therapies;
- the strength of marketing and distribution support;
- sufficient third-party coverage or reimbursement; and
- the prevalence and severity of any side effects.

If, in the future, we are unable to establish sales and marketing capabilities or to selectively enter into agreements with third parties to sell and market our product candidates, we may not be successful in commercializing our product candidates if and when they are approved.

We do not have a sales or marketing infrastructure and have no experience in the sale, marketing or distribution of pharmaceutical products. To achieve commercial success for any approved product for which we retain sales and marketing responsibilities, we must either develop a sales and marketing organization or outsource these functions to other third parties. For our small molecule arginase inhibitors in hematology and oncology indications, including CB-1158, unless we establish our own sales and marketing capabilities, we will be significantly dependent on Incyte's sales and marketing infrastructure to effectively commercialize these products. In the future, we may choose to build a focused sales and marketing infrastructure to sell some of our product candidates if and when they are approved.

There are risks involved both with establishing our own sales and marketing capabilities and with entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

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

- our inability to recruit and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to health care professionals or persuade adequate numbers of health care professionals to prescribe any future products; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

If we enter into arrangements with third parties to perform sales, marketing and distribution services, our product revenue or the profitability of these product revenue to us may be lower than if we were to market and sell any products that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell and market our product candidates or may be unable to do so on terms that are favorable to us. We may have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates.

We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than we do.*

The development and commercialization of new drug products is highly competitive. Research and discoveries by others may result in breakthroughs which may render our products obsolete even before they generate any revenue. We face competition with respect to our current product candidates, and will face competition with respect to any product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of products for the treatment of the cancer indications for which we are focusing our product development efforts. Some of these competitive products and therapies are based on scientific approaches that are the same as or similar to our approach and others are based on entirely different approaches. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

We are developing our product candidates for the treatment of various cancers. There are a variety of available drug therapies marketed for cancer. In many cases, these drugs are administered in combination to enhance efficacy. Some of the currently approved drug therapies are branded and subject to patent protection, and others are available on a generic basis. Many of these approved drugs are well-established therapies and are widely accepted by health care professionals, patients and third-party payors. Insurers and other third-party payors may also encourage the use of generic products. We expect that if our product candidates are approved, they will be priced at a significant premium over competitive generic products. This may make it difficult for us to achieve our business strategy of using our product candidates in combination with existing therapies or replacing existing therapies with our product candidates.

There are also a number of product candidates in preclinical and clinical development by third parties to treat cancer by targeting cellular metabolism. Our principal competitors include Abbvie Inc., Advanced Cancer Therapeutics, LLC, Aeglea Biotherapeutics, Inc., Agios Pharmaceuticals, Inc., AstraZeneca plc, Bayer Pharma AG, Boehringer Ingelheim GmbH, Bristol-Myers Squibb Company, Celgene Corporation, CureTech Ltd., Eli Lilly and Company, Forma Therapeutics Holdings, LLC, Fortress Biotech, Inc., GlaxoSmithKline plc, Incyte Corporation, iTeos Therapeutics SA, Merck & Co., Janssen Biotech, Inc., Merck KGaA, NewLink Genetics Corporation, Novartis International AG, Ono Pharmaceuticals, Co., Ltd, Pfizer Inc., Quantum Pharmaceuticals, Rafael Pharmaceuticals, Inc., Regeneron Pharmaceuticals, Inc., Rhizen Pharmaceuticals SA, Roche Holdings, and its subsidiary Genentech Inc., Sanofi-Aventis Groupe, Sprint Biosciences, Takeda Pharmaceutical Co. Ltd., TG Therapeutics, Inc., and 3-V Biosciences, Inc.

Our competitors may develop products that are more effective, safer, more convenient or less costly than any that we are developing or that would render our product candidates obsolete or non-competitive. In addition, our competitors may discover biomarkers that more efficiently measure metabolic pathways than our methods, which may give them a competitive advantage in developing potential products. Our competitors may also obtain marketing approval from the FDA or other regulatory authorities for their products sooner than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties may compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Even if we are able to commercialize any product candidates, these products may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, which would harm our business.

The regulations that govern marketing approvals, pricing and reimbursement for new drugs vary widely from country to country. In the United States, new and future legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product-licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial marketing approval is granted. As a result, we might obtain marketing approval for a drug in a particular country, but then be subject to price regulations that delay its commercial launch, possibly for lengthy time periods, and negatively impact the revenue we are able to generate from the sale of the drug in that country. Adverse pricing limitations may hinder our ability to commercialize and generate revenue from one or more product candidates, even if our product candidates obtain marketing approval.

Our ability to commercialize any product candidates successfully also will depend in part on the extent to which reimbursement for these products and related treatments will be available from government health programs, private health insurers and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. A significant trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of payment 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 medical products. Reimbursement may not be available for any product that we commercialize and, if reimbursement is available, the level of reimbursement may not be sufficient. Reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If reimbursement is not available or is available only to limited levels, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval.

There may be significant delays in obtaining reimbursement for newly approved products, and coverage may be more limited than the purposes for which the product is approved by the FDA or similar regulatory authorities outside the United States. Moreover, eligibility for reimbursement does not imply that any product will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the medical circumstances under which it is used, may be based on reimbursement levels already set for lower cost products or procedures or may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policies and payment limitations in setting their own reimbursement policies. Our inability to promptly obtain coverage and profitable payment rates from both government-funded programs and private payors for any approved products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize our approved products and our overall financial condition.

We are subject to certain healthcare laws, regulation and enforcement that may impact the commercialization of our product candidates. Failure to comply with such laws, regulations and enforcement could subject us to significant fines and penalties and result in a material adverse effect on our operations and financial condition.*

- we may be subject to fines, injunctions or the imposition of civil or criminal penalties, in the following areas: the federal Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act (collectively, "HIPAA"), as amended by the Health Information for Economic and Clinical Health Act of 2009 ("HITECH") which governs the conduct of certain electronic healthcare transactions and protects the security and privacy of protected health information;
- the federal healthcare programs' Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs;
- federal False Claims Act which prohibits, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payers that are false or fraudulent;
- the Federal Food, Drug, and Cosmetic Act, which, among other things, strictly regulates drug product marketing, prohibits manufacturers from marketing drug products for off-label use, and regulates the distribution of drug samples;
- the Foreign Corrupt Practices Act, which among other things, prohibits bribery of non-US government (i.e., foreign) officials;
- the PhRMA Code on Interactions with Healthcare Professionals (codified into law in California), which among other things, governs appropriate interactions between pharmaceutical manufacturers and healthcare professionals;
- federal criminal laws that prohibit executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payer, including federal government payers and commercial insurers; and
- additionally, the compliance environment is changing, with more states, such as California and Massachusetts, mandating implementation of compliance programs, compliance with industry ethics codes, and spending limits, and other states, such as Vermont, District of Columbia, and Minnesota limiting the provision of and/or requiring reporting to state governments of gifts, compensation, and other remuneration to healthcare professionals. Moreover, Section 6002 of the Patient Protection and Affordable Care Act ("PPACA") includes new requirements for pharmaceuticals manufacturers, among others, to report certain financial arrangements with health care professionals and teaching hospitals, as defined in PPACA, including reporting any payment or "transfer of value" made or distributed to teaching hospitals, prescribers, and other healthcare providers and reporting any ownership and investment interests held by health care professionals and their immediate family members and applicable group purchasing organizations during the preceding calendar year. Section 6002 of PPACA includes in its reporting requirements a broad range of transfers of value (such as, for example, consulting fees, charitable contributions, payments for research, and grants).

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, the curtailment or restructuring of our operations, the exclusion from participation in federal and state healthcare programs and imprisonment, any of which could adversely affect our ability to operate our business and our financial results.

Product liability lawsuits against us could cause us to incur substantial liabilities and could limit the commercialization of any product candidates we may develop.

We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop after approval. If we cannot successfully defend ourselves against claims that our product candidates caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend any related litigation;

- substantial monetary awards to trial participants or patients;
- loss of revenue; and
- the inability to commercialize any products we may develop.

Although we maintain product liability insurance coverage in the amount of up to $10.0 million per claim and in the aggregate, it may not be adequate to cover all liabilities that we may incur. We anticipate that we will need to increase our insurance coverage as we continue clinical trials and if we successfully commercialize any products. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could harm our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

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

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Risks Related to Our Dependence on Third Parties

We rely on third parties to conduct our clinical trials and some aspects of our research and preclinical testing and manufacture our product candidates, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials, research or testing.*

We currently rely and expect to continue to rely on third parties, such as our collaborators, contract research organizations, clinical data management organizations, medical institutions and clinical investigators, to conduct our clinical trials and to conduct some aspects of our research and preclinical testing. Any of these third parties may terminate their engagements with us at any time. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates. Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. If we need to enter into alternative arrangements, it would delay our product development activities.

Our reliance on these third parties for research and development activities will reduce our control over these activities but will not relieve us of our responsibilities. For example, we will remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with standards, commonly referred to as Good Clinical Practices, for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a government sponsored database, available at www.clinicaltrials.gov, within certain timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

We do not have any manufacturing facilities. We currently rely, and expect to continue to rely, on third party manufacturers for the manufacture of our product candidates for preclinical studies and clinical trials and for commercial supply of any of these product candidates for which we obtain marketing approval. To date, we have obtained or plan to obtain materials for CB-839 and CB-1158 for our current and planned clinical trials from third-party manufacturers. We have engaged third party manufacturers to obtain the active ingredient for CB-839 and CB-1158 for pre-clinical testing and clinical trials. We do not have a long-term supply agreement with any third-party manufacturers, and we purchase our required drug supply on a purchase order basis.

We may be unable to establish agreements with third-party manufacturers or to do so on acceptable terms. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- reliance on the third party for regulatory compliance and quality assurance;
- the possible breach of the manufacturing agreement by the third party; and
- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us.

Third-party manufacturers may not be able to comply with current U.S. Good Manufacturing Practice requirements ("cGMPs"), or similar regulatory requirements outside the United States. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates, operating restrictions and criminal prosecutions, any of which could adversely affect supplies of our product candidates and harm our business and results of operations.

Any product that we may develop may compete with other product candidates and products for access to these manufacturing facilities. There are a limited number of manufacturers that operate under cGMPs and that might be capable of manufacturing for us.

Any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval. We do not currently have arrangements in place for redundant supply for bulk drug substances. If any one of our current contract manufacturers cannot perform as agreed, we may be required to replace that manufacturer. Although we believe that there are several potential alternative manufacturers who could manufacture our product candidates, we may incur added costs and delays in identifying and qualifying any such replacement.

Our current and anticipated future dependence upon others for the manufacture of our product candidates or products may adversely affect our future profit margins and our ability to commercialize any product candidates that receive marketing approval on a timely and competitive basis.

We also currently rely, and expect to continue to rely, on third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of these third parties could delay clinical development or marketing approval of our product candidates or commercialization of our drugs, producing additional losses and depriving us of potential revenue. Although we believe that there are several potential alternative third parties who could store and distribute drug supplies for our clinical trials, we may incur added costs and delays in identifying and qualifying any such replacement.

Our arginase inhibitors program in hematology and oncology indications, including CB-1158, is reliant in part on Incyte for the successful development and commercialization in a timely manner. If Incyte does not devote sufficient resources to CB-1158's development, is unsuccessful in its efforts, or chooses to terminate its agreement with us, our business, operating results and financial condition will be harmed.

We have entered into the Incyte Collaboration Agreement under which we have granted Incyte an exclusive, worldwide license to develop and commercialize small molecule arginase inhibitors for hematology and oncology indications, including CB-1158, which is currently in phase 1 clinical trials.

Under the agreement, we and Incyte will jointly conduct and co-fund development of CB-1158, with Incyte leading global development activities. Unless we opt out of our co-funding obligation, Incyte will fund 70 percent of global development and we will be responsible for the remaining 30 percent. Should we disagree with Incyte about the clinical development or commercialization strategy, we could escalate the disagreement to our representatives on the Joint Steering Committee for resolution. Calithera and Incyte are obligated to use good faith efforts to resolve such disputes; however, in cases of deadlock, Incyte will have the deciding vote. If the agreement is terminated, other than as a result of our breach, with respect to one or more products or countries, all rights in the terminated products and countries revert to us. The Incyte collaboration may not be clinically or commercially successful due to a number of important factors, including the following:

- Subject to the terms of our collaboration agreement, including diligence obligations, although Incyte has certain obligations to use commercially reasonable efforts to develop and commercialize CB-1158, Incyte has discretion in determining the efforts and resources that it will apply to its partnership with us. The timing and amount of any development milestones, and downstream commercial milestones and royalties that we may receive under such

partnership will depend on, among other things, the efforts, allocation of resources and successful development and commercialization of CB-1158;
- Incyte may select a dose for CB-1158 that does not have a favorable benefit/risk profile;
- Incyte may terminate its partnership with us without cause and for circumstances outside of our control, which could make it difficult for us to attract new strategic partners or adversely affect how we are perceived in scientific and financial communities;
- Incyte may develop or commercialize CB-1158 in a way that exposes us to potential litigation that could jeopardize or invalidate our intellectual property rights or expose us to potential liability; and

If Incyte were to breach our collaboration agreement, we may need to enforce our rights under the agreement, which could be costly. If we were to terminate our agreement with Incyte due to Incyte's breach or if Incyte were to terminate the agreement without cause, there could be a delay in the return of our rights to CB-1158 and the development and commercialization of CB-1158 would be delayed, curtailed or terminated because we may not have sufficient financial resources or capabilities to continue development and commercialization on our own.

Incyte may enter into one or more transactions with third parties, including a merger, consolidation, reorganization, sale of substantial assets, sale of substantial stock or other change in control, which could divert the attention of its management and adversely affect Incyte's ability to retain and motivate key personnel who are important to the continued development of the small molecule arginase inhibitor program. In addition, the third party to any such transaction could reprioritize Incyte's development programs which could delay the development of our programs or cause Incyte to terminate the agreement.

We have in the past and may seek in the future to selectively establish collaborations, and, if we are unable to establish them on commercially reasonable terms, we may have to alter our development and commercialization plans.

Our drug development programs and the potential commercialization of our product candidates will require substantial additional cash to fund expenses. In addition to our collaboration with Incyte, for some of our product candidates, we may decide to collaborate with additional pharmaceutical and biotechnology companies for the development and potential commercialization of those product candidates.

We may also be restricted under existing license agreements from engaging in research and development activities or entering into future agreements on certain terms with potential collaborators. For example, pursuant to our license agreement with Symbioscience, we have agreed not to develop any other arginase inhibitors for use in human healthcare outside of the scope of that agreement. In addition, under our agreement with Incyte, we are not allowed to develop any retained arginase inhibitors (small molecule arginase inhibitors, other than CB-1158, retained by Calithera for research and development in non-hematology/oncology indications) for any indication except specific orphan indications outside of hematology and oncology.

We face significant competition in seeking appropriate collaborators. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by the FDA or similar regulatory authorities outside the United States, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge and industry and market conditions generally. The collaborator may also consider alternative product candidates for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate.

Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

If we decide to collaborate with any other third parties in connection with any of our development programs or product candidates, we may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development program or the product candidate for which we are seeking to collaborate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market and generate product revenue.

To the extent we enter into any other collaborations, we may depend on such collaborations for the development and commercialization of our product candidates. If those collaborations are not successful, we may not be able to capitalize on the market potential of our product candidates.

We may selectively seek additional third-party collaborators for the development and commercialization of our product candidates. Our current and any future collaborators for any collaboration arrangements include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies. Pursuant to these arrangements and any potential future arrangements, we will have limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of our product candidates. Our ability to generate revenue from these arrangements will depend on our collaborators' abilities to successfully perform the functions assigned to them in these arrangements.

Collaborations involving our product candidates, including our collaboration with Incyte, pose many risks to us, including that:

- Collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- Collaborators may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborator's strategic focus or available funding or external factors such as an acquisition that diverts resources or creates competing priorities;
- Collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- Collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our product candidates or products if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- A collaborator with marketing and distribution rights to one or more product candidates or products may not commit sufficient resources to the marketing and distribution of such drugs;
- Collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our proprietary information or expose us to potential litigation;
- Disputes may arise between the collaborators and us that result in the delay or termination of the research, development or commercialization of our product candidates or products or that result in costly litigation or arbitration that diverts management attention and resources;
- We may lose certain valuable rights under circumstances identified in our collaborations if we undergo a change of control;
- Collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates; and
- Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner or at all. If a future collaborator of ours were to be involved in a business combination, the continued pursuit and emphasis on our product development or commercialization program under such collaboration could be delayed, diminished or terminated.

We have in-licensed portfolios of arginase inhibitors and hexokinase II inhibitors, respectively, as part of our efforts to develop product candidates for these programs, and we are substantially dependent on these in-licenses for these programs. To the extent these in-licenses are terminated, our business may be harmed.

Risks Related to Our Intellectual Property

Recent laws and rulings by U.S. courts make it difficult to predict how patents will be issued or enforced in our industry.

Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may have a significant impact on our ability to protect our technology and enforce our intellectual property rights. There have been numerous recent changes to the patent laws and to the rules of the United States Patent and Trademark Office ("USPTO"), which may have a significant impact on our ability to protect our technology and enforce our intellectual property rights. For example, the Leahy-Smith America Invents Act, which was signed into law in 2011, includes a transition from a "first-to-invent" system to a "first-to-file" system, and changes the way issued patents are challenged. Certain changes, such as the institution of inter partes review proceedings, came into effect on September 16, 2012. Substantive changes to patent law associated with the America Invents Act may affect our ability to obtain patents, and, if obtained, to enforce or defend them in litigation or post-grant proceedings, all of which could harm our business.

Furthermore, the patent positions of companies engaged in the development and commercialization of biologics and pharmaceuticals are particularly uncertain. Two cases involving diagnostic method claims and “gene patents” have recently been decided by the Supreme Court. On March 20, 2012, the Supreme Court issued a decision in Mayo Collaborative Services v. Prometheus Laboratories, Inc., or Prometheus, a case involving patent claims directed to measuring a metabolic product in a patient to optimize a drug dosage amount for the patient. According to the Supreme Court, the addition of well-understood, routine or conventional activity such as “administering” or “determining” steps was not enough to transform an otherwise patent ineligible natural phenomenon into patent eligible subject matter. On July 3, 2012, the USPTO issued guidance indicating that process claims directed to a law of nature, a natural phenomenon or an abstract idea that do not include additional elements or steps that integrate the natural principle into the claimed invention such that the natural principle is practically applied and the claim amounts to significantly more than the natural principle itself should be rejected as directed to non-statutory subject matter. On June 13, 2013, the Supreme Court issued its decision in Association for Molecular Pathology v. Myriad Genetics, Inc., or Myriad, a case involving patent claims held by Myriad Genetics, Inc. relating to the breast cancer susceptibility genes BRCA1 and BRCA2. Myriad held that isolated segments of naturally occurring DNA, such as the DNA constituting the BRCA1 and BRCA2 genes, is not patent eligible subject matter, but that complementary DNA, which is an artificial construct that may be created from RNA transcripts of genes, may be patent eligible.

We cannot assure you that our efforts to seek patent protection for our technology and products will not be negatively impacted by the decisions described above, rulings in other cases or changes in guidance or procedures issued by the USPTO. We cannot fully predict what impact the Supreme Court’s decisions in Prometheus and Myriad may have on the ability of life science companies to obtain or enforce patents relating to their products and technologies in the future.

Moreover, although the Supreme Court has held in Myriad that isolated segments of naturally occurring DNA are not patent-eligible subject matter, certain third parties could allege that activities that we may undertake infringe other gene-related patent claims, and we may deem it necessary to defend ourselves against these claims by asserting non-infringement and/or invalidity positions, or pay to obtain a license to these claims. In any of the foregoing or in other situations involving third-party intellectual property rights, if we are unsuccessful in defending against claims of patent infringement, we could be forced to pay damages or be subjected to an injunction that would prevent us from utilizing the patented subject matter. Such outcomes could harm our business.

If we are alleged to infringe intellectual property rights of third parties, our business could be harmed.

Our research, development and commercialization activities may be alleged to infringe patents, trademarks or other intellectual property rights owned by other parties. Certain of our competitors and other companies in the industry have substantial patent portfolios and may attempt to use patent litigation as a means to obtain a competitive advantage. We may be a target for such litigation. Even if our pending patent applications issue, they may relate to our competitors’ activities and may therefore not deter litigation against us. The risks of being involved in such litigation may also increase as we become more visible as a public company and move into new markets and applications for our product candidates. There may also be patents and patent applications that are relevant to our technologies or product candidates that are unknown to us. For example, certain relevant patent applications may have been filed but not published. If such patents exist, or if a patent issues on any of such patent applications, that patent