As filed with the Securities and Exchange Commission on July 2, 2015

Registration No. 333-203503

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

AMENDMENT NO. 2
TO
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Kura Oncology, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**2834**	**61-1547851**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification Number)**

11119 N. Torrey Pines Road, Suite 125
La Jolla, CA 92037
(858) 500-8800
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Troy Wilson, Ph.D., J.D.
President and Chief Executive Officer
Kura Oncology, Inc.
11119 N. Torrey Pines Road, Suite 125
La Jolla, CA 92037
(858) 500-8800
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:
Charles J. Bair, Esq.
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4401 Eastgate Mall
San Diego, CA 92121
Telephone: (858) 550-6000

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting 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	☒

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. The selling stockholders named in this preliminary prospectus may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and the selling stockholders named in this preliminary prospectus are not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, Dated July 2, 2015

PRELIMINARY PROSPECTUS

KURA ONCOLOGY

14,279,820 Shares of Common Stock

This prospectus relates to the offering and resale by the selling stockholders identified herein of up to 14,279,820 shares of our common stock, par value $0.0001 per share. These shares were privately issued to the selling stockholders on March 6, 2015 in exchange for shares of Kura Oncology, Inc., a Delaware corporation, which became our wholly-owned subsidiary on March 6, 2015 and subsequently merged with and into us, with us continuing as the surviving entity. We will not receive any proceeds from the sale of these shares by the selling stockholders. The selling stockholders may sell the shares as set forth herein under "Plan of Distribution." For a list of the selling stockholders, see the section entitled "Selling Stockholders" on page 110. We have borne and will continue to bear the costs relating to the registration of these shares.

There is not currently, and there has never been, any public market for any of our securities. Our securities are not currently eligible for trading on any national securities exchange, including the NASDAQ Stock Market, or any over-the-counter markets, including the OTC Markets—OTCQB tier, or OTCQB. We cannot assure you that our securities will become eligible for trading on any exchange or market. In connection with this offering, we have arranged for a registered broker-dealer to apply to have our common stock quoted on the OTCQB or another over-the-counter system. Until such time as our common stock is quoted on the OTCQB or another public trading market otherwise develops, the selling stockholders identified herein may only sell their shares of our common stock pursuant to this prospectus at a fixed price of $6.32 per share. At and after such time, the selling stockholders may sell all or a portion of their shares through public or private transactions at prevailing market prices or at privately negotiated prices.

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

We are an "emerging growth company" as defined under the federal securities laws, and, as such, are eligible for reduced public company reporting requirements. See "Prospectus Summary—Implications of Being an Emerging Growth Company."

Investment in our common stock involves risks. See "Risk Factors" beginning on page 9 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2015

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ABOUT THIS PROSPECTUS

You should rely only on the information contained in this prospectus or contained in any prospectus supplement or free writing prospectus filed with the Securities and Exchange Commission, or SEC. Neither we nor the selling stockholders have authorized anyone to provide you with additional information or information different from that contained in this prospectus filed with the SEC. The selling stockholders are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside the United States: Neither we nor the selling stockholders have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside the United States.

PROSPECTUS SUMMARY

The following summary highlights selected information contained elsewhere in this prospectus. This summary is not complete and does not contain all the information that should be considered before investing in our common stock. Before making an investment decision, investors should carefully read the entire prospectus, paying particular attention to the risks referred to under the headings "Risk Factors" and "Cautionary Statement Regarding Forward-Looking Statements" and our financial statements and the notes to those financial statements.

As used in this prospectus, unless the context requires otherwise, the terms "Company," "we," "our" and "us" refer to Kura Oncology, Inc.

Overview

We are a clinical stage biopharmaceutical company discovering and developing personalized therapeutics for the treatment of solid tumors and blood cancers. We focus on the development of small molecule product candidates that target cell signaling pathways that are important to driving the progression of certain cancers. We aim to employ molecular diagnostics to identify patients with cancers who are likely to benefit from our targeted product candidates.

Advancements in cancer genetics and new molecular diagnostic tools are helping define why some patients respond to a particular therapy while other patients receive little to no clinical benefit. This new era in cancer drug discovery and development offers the potential for innovative treatments that are safer and more effective for patients with particular cancers. We aim to improve patient outcomes and contribute to the reduction in healthcare costs by matching targeted therapeutics to the patients who will benefit the most. We are developing drugs designed to inhibit the mutated or abnormally functioning cellular pathways that drive cancer growth and intend to pair them with molecular diagnostics to identify those patients with tumors most likely to respond to treatment.

Our lead product candidate, tipifarnib, is an inhibitor of protein farnesylation that is currently in a Phase 2 clinical study for the treatment of patients with solid tumors with HRAS mutations. We also intend to study tipifarnib in patients with peripheral T-cell lymphoma and are evaluating other potential indications.

Our pipeline includes two preclinical programs (1) orally-available small molecule inhibitors of extracellular-signal-regulated kinases 1 and 2 (ERK1/2), including KO-947 and other backup compounds in development as a potential treatment for patients with activating mutations in or other dysregulation of the mitogen-activated protein kinase (MAPK) signaling pathway, including mutations in KRAS, BRAF and NRAS and (2) orally available, small molecule inhibitors of the menin-MLL interaction, which are currently in lead optimization as a potential treatment for patients with acute leukemias involving translocations or partial tandem duplications of the mixed lineage leukemia (MLL) gene.

Reverse Merger and Selling Stockholders

Pursuant to an Agreement and Plan of Merger dated March 6, 2015, or the Merger Agreement, by and among Zeta Acquisition Corp. III; Kura Operations, Inc., a Delaware corporation and wholly-owned subsidiary of Zeta Acquisition Corp. III, or Merger Sub; and Kura Oncology, Inc., a Delaware corporation, which, unless otherwise indicated, we refer to as Prior Kura; Merger Sub merged with and into Prior Kura, with Prior Kura remaining as the surviving entity and a wholly-owned operating subsidiary of Zeta Acquisition Corp. III. This transaction is referred to throughout this prospectus as the "Merger." The Merger was effective on March 6, 2015, upon the filing of a Certificate of Merger with the Secretary of State of the State of Delaware. As part of the Merger, Prior Kura changed its name to Kura Operations, Inc. A copy of the Merger Agreement is filed as Exhibit 2.1 to the registration statement of which this prospectus forms a part.

Immediately following the Merger, a newly organized wholly-owned subsidiary of Zeta Acquisition Corp. III named "Kura Oncology, Inc." merged with and into Zeta Acquisition Corp. III, leaving Zeta Acquisition Corp. III as the surviving corporation. We refer to this transaction as the "Name Change Merger." In connection with the Name Change Merger, we relinquished our corporate name "Zeta Acquisition Corp. III" and assumed in its place the name "Kura Oncology, Inc." The Name Change Merger and name change became effective on March 6, 2015, upon the filing of a Certificate of Ownership and Merger with the Secretary of State of the State of Delaware. The Certificate of Ownership and Merger is filed as Exhibit 3.3 to the registration statement of which this prospectus forms a part.

In addition, on March 31, 2015, Kura Operations, Inc. merged with and into us and we continued as the surviving entity. We refer to this transaction as the "Upstream Merger."

At the effective time of the Merger, or the Effective Time, the legal existence of Merger Sub ceased and each share of Prior Kura common stock that was issued and outstanding immediately prior to the Effective Time was automatically exchanged for 0.5 shares of our common stock, which we refer to as the Exchange. We issued an aggregate of 14,508,177 shares of our common stock upon such exchange of the outstanding shares of Prior Kura common stock. In addition, at the Effective Time, we assumed Prior Kura's 2014 Equity Incentive Plan and concurrently approved the amendment and restatement of Prior Kura's 2014 Equity Incentive Plan, which became effective in April 2015. As of the Effective Time, there were no outstanding options to purchase shares of Prior Kura common stock under the Prior Kura 2014 Equity Incentive Plan.

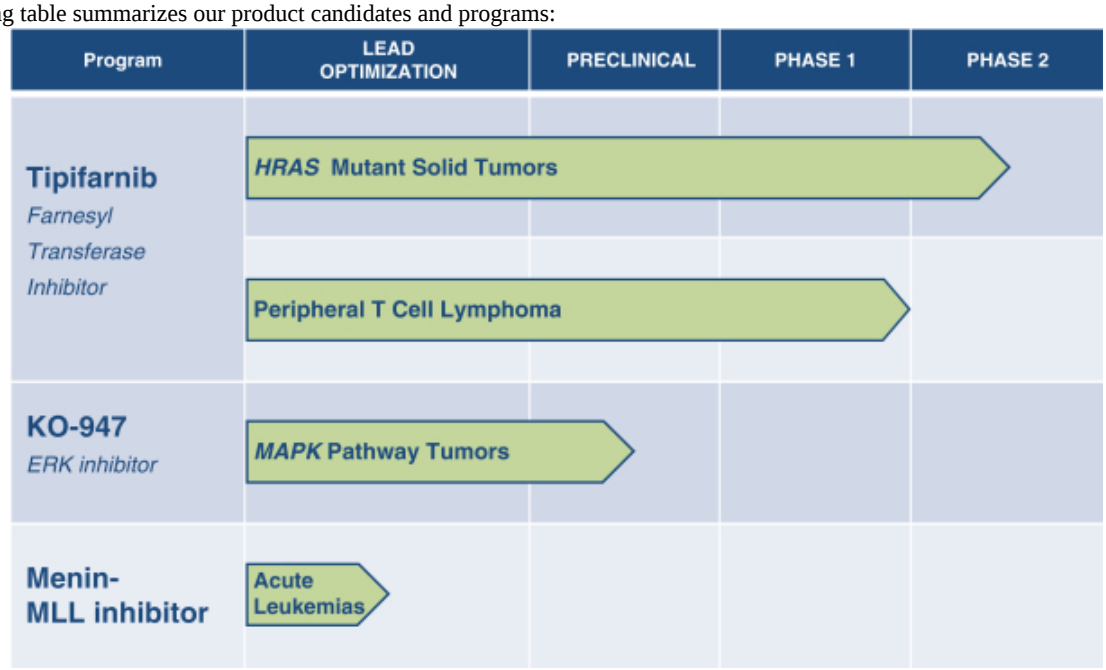
Immediately following the Effective Time, pursuant to the terms of a Redemption Agreement dated March 6, 2015, or the Redemption Agreement, by and among Zeta Acquisition Corp. III and its pre-Merger stockholders, we completed the closing of a redemption of 5,000,000 shares of our common stock, or the Redemption, from our pre-Merger stockholders for consideration of $70,000, plus $30,000 in professional costs related to the transaction. The 5,000,000 shares constituted all of the issued and outstanding shares of our capital stock, on a fully-diluted basis, immediately prior to the Merger. A copy of the Redemption Agreement is filed as Exhibit 10.10 to the registration statement of which this prospectus forms a part.

Upon completion of the Merger and the Redemption, the former stockholders of Prior Kura held 100% of the outstanding shares of our capital stock. Unless otherwise indicated in this prospectus, all share and per share figures reflect the exchange of each share of Prior Kura common stock then outstanding for 0.5 shares of our common stock at the Effective Time of the Merger.

The issuance of shares of our common stock in the Merger was exempt from registration under Section 4(a)(2) of the Securities Act of 1933, as amended, or the Securities Act, and Rule 506(b) of Regulation D promulgated thereunder. This prospectus relates to the sale or other disposition from time to time of up to 14,279,820 shares of our common stock issued in the Merger that are held by the selling stockholders named in this prospectus.

Our Product Candidates

The following table summarizes our product candidates and programs:



The preclinical studies and Phase 1–3 clinical trials in support of our Investigational Drug Application, or IND, for tipifarnib were conducted by companies within the Johnson & Johnson family of companies and the National Cancer Institute. Efficacy and safety observations included in our IND submission are from 17 phase 1, 2 and 3 single-agent clinical trials conducted prior to December 31, 2007.

Our Strategy

Our strategy is to acquire, develop, and commercialize innovative anti-cancer agents in oncology indications with significant unmet medical need. The critical components of our strategy include the following:

- focus on oncology;
- focus on compounds where improved outcomes are associated with specific biomarkers;
- leverage companion diagnostics to realize positive clinical outcomes;
- advance our product candidates in clinical proof-of-concept studies; and
- seek and maintain significant development and commercial rights.

Risk Factors

Our ability to implement our business strategy is subject to numerous risks and uncertainties. As a clinical stage biopharmaceutical company, we face many risks inherent in our business and our industry generally. You should carefully consider all of the information set forth in this prospectus and in particular, the information

under the heading “Risk Factors”, prior to making an investment in our common stock. These risks include, among others, the following:

- We expect to incur losses over the next several years and may never achieve or maintain profitability.
- Our limited operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.
- We are a clinical-stage company with no approved products and no historical product revenue. Consequently, we expect that our financial and operating results will vary significantly from period to period.
- Our research and development programs and product candidates are at an early stage of development. As a result we are unable to predict if or when we will successfully develop or commercialize our product candidates.
- Clinical drug development involves a lengthy and expensive process with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.
- Failure to successfully validate, develop and obtain regulatory approval for companion diagnostics for our product candidates could harm our drug development strategy and operational results.
- If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals, we will not be able to commercialize our product candidates, and our ability to generate revenue will be materially impaired.
- We may not be able to obtain orphan drug exclusivity for the product candidates for which we seek it, which could limit the potential profitability of such product candidates.
- We will depend on third parties for the manufacture of our product candidates for preclinical and clinical testing and expect to continue to do so for commercialization. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or products at an acceptable cost and quality, which could delay, prevent or impair our development or commercialization efforts.
- We face substantial competition, which may result in others discovering, developing or commercializing competing products before or more successfully than we do.
- If we are unable to obtain and maintain intellectual property protection for our technology and products, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and products may be impaired.
- We currently have a limited number of employees, are highly dependent on our Chief Executive Officer and our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

Implications of Being an Emerging Growth Company

We qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act, or JOBS Act, enacted in April 2012. An emerging growth company may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes- Oxley Act of 2002, or Sarbanes-Oxley Act;
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and

- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We may take advantage of these provisions for up to five years after the first sale of our common equity securities pursuant to an effective registration statement under the Securities Act, which we expect will be pursuant to the registration statement of which this prospectus forms a part or the registration statement on Form S-8 that we filed with the SEC on April 17, 2015. However, if certain events occur prior to the end of such five year period, including if we become a "large accelerated filer," our annual gross revenues exceed $1 billion or we issue more than $1 billion of non-convertible debt in any three year period, we would cease to be an emerging growth company prior to the end of such five year period.

We may choose to take advantage of some but not all of these reduced burdens. We have taken advantage of certain of the reduced disclosure obligations regarding executive compensation in this registration statement and may elect to take advantage of other reduced burdens in future filings. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. However, we have irrevocably elected not to avail ourselves of this extended transition period for complying with new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

We are also a "smaller reporting company" as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and have elected to take advantage of certain of the scaled disclosure available to smaller reporting companies.

Our Corporate Information

We were originally incorporated in the State of Delaware in November 2007 under the name "Zeta Acquisition Corp. III." Prior to the Merger, Zeta Acquisition Corp. III was a "shell" company registered under the Exchange Act with no specific business plan or purpose until it began operating the business of Prior Kura through the Merger transaction on March 6, 2015. Prior Kura was incorporated in the State of Delaware in August 2014 to focus primarily on discovering and developing personalized therapeutics for the treatment of solid tumors and blood cancers. Effective upon the Merger, a wholly-owned subsidiary of Zeta Acquisition Corp. III merged with and into Prior Kura, and Prior Kura continued as the operating subsidiary of Zeta Acquisition Corp. III, changing its name to Kura Operations, Inc. In addition, on March 31, 2015, Kura Operations, Inc. merged with and into us and we continued as the surviving entity.

Our corporate headquarters are located at 11119 N. Torrey Pines Road, Suite 125, La Jolla, California 92037, and our telephone number is (858) 500-8800. We also occupy two offices in Cambridge, Massachusetts. We maintain a website at www.kuraoncology.com, to which we regularly post copies of our press releases as well as additional information about us. Our filings with the SEC will be available free of charge through the website as soon as reasonably practicable after being electronically filed with or furnished to the SEC. Information contained in our website does not constitute a part of this prospectus or our other filings with the SEC.

All brand names or trademarks appearing in this prospectus are the property of their respective holders. Use or display by us of other parties' trademarks, trade dress, or products in this prospectus is not intended to, and does not, imply a relationship with, or endorsements or sponsorship of, us by the trademark or trade dress owners.

THE OFFERING

Common stock offered by selling stockholders	14,279,820 shares
Common stock outstanding	14,508,177 shares
Use of proceeds	We will not receive any proceeds from the sale of the shares of common stock offered by the selling stockholders.
Offering price	The selling stockholders may only sell their shares of our common stock pursuant to this prospectus at a fixed price of $6.32 per share until such time as our common stock is quoted on the OTC Markets—OTCQB tier, or OTCQB, or another public trading market for our common stock otherwise develops. At and after such time, the selling stockholders may sell all or a portion of their shares through public or private transactions at prevailing market prices or at privately negotiated prices.
Risk factors	You should read the “Risk Factors” section of this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
Market for our shares	There is not now and never has been any market for our securities and an active market may never develop. In connection with this offering, we have arranged for a broker-dealer to apply to have our common stock quoted on the OTCQB or another over-the-counter system. In the future, we intend to seek to have our common stock quoted on a national securities exchange. However, we may not be successful in having our shares quoted on an over-the-counter market or listed on a national securities exchange.

The number of shares of common stock outstanding is based on an aggregate of 14,508,177 shares outstanding as of May 31, 2015, and excludes:

- 410,000 shares of common stock issuable upon the exercise of outstanding stock options, each at an exercise price of $6.32 per share;
- 621,500 shares of common stock reserved for future issuance under our Amended and Restated 2014 Equity Incentive Plan, or 2014 plan, plus any future increases in the number of shares of common stock reserved for issuance under the 2014 plan pursuant to evergreen provisions; and
- 25,000 shares of common stock reserved for future issuance under our 2015 Employee Stock Purchase Plan, or 2015 ESPP, plus any future increases in the number of shares of common stock reserved for issuance under the 2015 ESPP pursuant to evergreen provisions.

Unless otherwise indicated in this prospectus, all share and per share figures reflect the exchange of each share of Prior Kura common stock then outstanding for 0.5 shares of our common stock upon the Effective Time of the Merger on March 6, 2015.

SUMMARY FINANCIAL DATA

The following tables summarize Prior Kura's and our financial data for the periods presented and should be read together with the sections of this prospectus entitled "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and our financial statements and related notes appearing elsewhere in this prospectus. The summary financial data in this section are not intended to replace our financial statements and related notes. The following summary statement of operations for the period from August 22, 2014 (inception) to December 31, 2014 and summary balance sheet data as of December 31, 2014 have been derived from Prior Kura's audited financial statements and footnotes included elsewhere in this prospectus. The following summary statement of operations for the three months ended March 31, 2015 and summary balance sheet data as of March 31, 2015 have been derived from our unaudited financial statements and footnotes, respectively, included elsewhere in this prospectus. We have prepared the unaudited financial statements on the same basis as the audited financial statements and have included all adjustments, consisting only of normal recurring adjustments, which in our opinion are necessary to state fairly the financial information set forth in those statements. Our historical results are not necessarily indicative of the results we expect in the future, and our interim results should not necessarily be considered indicative of results we expect for the full year.

Statements of Operations data:	**Period From August 22, 2014 (Inception) to December 31, 2014**	**Three Months Ended March 31, 2015** *(Unaudited)*
Operating expenses:		
Research and development	$ 2,028,227	$ 2,603,874
Research and development, related party	624,565	1,023,736
General and administrative	1,261,621	1,037,344
General and administrative, related party	19,734	22,674
Total operating expenses	3,934,147	4,687,628
Other income (expense):		
Management fee income, related party	300,000	300,000
Interest expense	—	(42,446)
Interest expense, related party	(37,119)	(45,783)
Total other income	262,881	211,771
Net loss and comprehensive loss	$ (3,671,266)	$ (4,475,857)
Net loss per share, basic and diluted	$ (25.98)	$ (1.41)
Weighted average number of shares used in computing net loss per share, basic and diluted	141,306	3,183,735

	December 31, 2014	**March 31, 2015** *(Unaudited)*
Balance Sheet data:		
Cash	$ 1,123,864	$53,571,398
Working capital	(1,819,282)	49,096,083
Total assets	1,377,840	54,816,051
Long-term liabilities	1,795,477	390,835
Accumulated deficit	(3,671,266)	(8,147,123)
Total stockholders' equity (deficit)	(3,433,484)	48,894,332

RISK FACTORS

Investing in our common stock involves a high degree of risk. In addition to the information, documents or reports included or incorporated by reference in this prospectus and, if applicable, any prospectus supplement or other offering materials, you should carefully consider the risks described below in addition to the other information contained in this prospectus, before making an investment decision. Our business, financial condition or results of operations could be harmed by any of these risks. As a result, you could lose some or all of your investment in our common stock. The risks and uncertainties described below are not the only ones we face. Additional risks not currently known to us or other factors not perceived by us to present significant risks to our business at this time also may impair our business operations.

Risks Related to Our Financial Position and Need For Additional Capital

We expect to incur losses over the next several years and may never achieve or maintain profitability.

We expect that it will be many years, if ever, before we have a product candidate ready for commercialization. To date, we have financed our operations primarily through equity and debt financings. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. The net losses we incur may fluctuate significantly from quarter to quarter. We anticipate that our expenses will increase substantially if and as we:

- continue development of our product candidates;
- initiate clinical trials for our product candidates;
- seek marketing approvals for our product candidates;
- establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval;
- maintain, expand and protect our intellectual property portfolio;
- hire additional personnel;
- add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts; and
- incur increased costs as a result of operating as a public company.

To become and remain profitable, we must develop and eventually commercialize a product or products with significant market potential. This will require us to be successful in a range of challenging activities, including completing clinical trials of our product candidates, obtaining marketing approval from the FDA for these product candidates and manufacturing, marketing and selling those products for which we may obtain marketing approval. We may never succeed in these activities and, even if we do, may never generate revenues that are significant or large enough to achieve profitability. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of the company and could impair our ability to raise capital, maintain our discovery and preclinical development efforts, expand our business or continue our operations and may require us to raise additional capital that may dilute your ownership interest. A decline in the value of our company could also cause you to lose all or part of your investment.

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

We are an early-stage clinical development company. Our operations to date have been limited to organizing and staffing our company, business planning, raising capital, identifying and acquiring potential

product candidates, undertaking preclinical studies and preparing to undertake clinical studies of our most advanced product candidate, tipifarnib. We have not yet demonstrated our ability to commence or successfully complete any clinical trials, including those clinical trials in support of FDA approval, 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 product commercialization. Medicines, on average, take 10 to 15 years to be developed from the time they are discovered to the time they are available for treating patients. Consequently, any predictions you make about our future success or viability based on our short operating history to date may not be as accurate as they could be if we had a longer operating history.

In addition, as a new business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. We will need to transition from a company with a research focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

We are a clinical-stage company with no approved products and no historical product revenue. Consequently, we expect that our financial and operating results will vary significantly from period to period.

We are a clinical-stage company that has incurred losses since its inception and expect to continue to incur substantial losses in the foreseeable future. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of uncertainty. We expect our actual financial condition and operating results to fluctuate significantly from quarter-to-quarter or year-to-year due to a variety of factors, many of which are beyond our control. Factors relating to our business that may contribute to these fluctuations include:

- the success of our clinical trials through all phases of clinical development;
- delays in the commencement, enrollment and timing of clinical trials;
- our ability to secure and maintain collaborations, licensing or other arrangements for the future development and/or commercialization of our product candidates, as well as the terms of those arrangements;
- our ability to obtain, as well as the timeliness of obtaining, additional funding to develop our product candidates;
- the results of clinical trials or marketing applications for product candidates that may compete with our product candidates;
- competition from existing products or new products that may receive marketing approval;
- potential side effects of our product candidates that could delay or prevent approval or cause an approved drug to be taken off the market;
- any delays in regulatory review and approval of our product candidates;
- our ability to identify and develop additional product candidates;
- the ability of patients or healthcare providers to obtain coverage or sufficient reimbursement for our products;
- our ability, and the ability of third parties such as clinical research organizations, or CROs, to adhere to clinical study and other regulatory requirements;
- the ability of third-party manufacturers to manufacture our product candidates and key ingredients needed to conduct clinical trials and, if approved, successfully commercialize our products;
- the costs to us, and our ability as well as the ability of any third-party collaborators, to obtain, maintain and protect our intellectual property rights;

- costs related to and outcomes of any future intellectual property litigation;
- our ability to adequately support future growth;
- our ability to attract and retain key personnel to manage our business effectively; and
- our ability to build our finance infrastructure and, to the extent required, improve our accounting systems and controls.

Accordingly, the likelihood of our success must be evaluated in light of many potential challenges and variables associated with a clinical-stage company, many of which are outside of our control, and past operating or financial results should not be relied on as an indication of future results. Fluctuations in our operating and financial results could cause our share price to decline. It is possible that in some future periods, our operating results will be above or below the expectations of securities analysts or investors, which could also cause our share price to decline.

We may be unable to raise additional funds when needed. 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 revenues, we expect to finance our cash needs through a combination of equity offerings and debt financings. We do not have any committed external source of funds. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect rights of our stockholders as a common stockholder. Debt financing and preferred equity 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.

We cannot be certain that additional funding will be available on acceptable terms, or at all. If we are unable to raise additional funds when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts.

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

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an “ownership change” (generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period), the corporation’s ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income may be limited. As a result of the Private Placement and other transactions that have occurred over the past three years, we may trigger an “ownership change” limitation. In addition, we may experience ownership changes in the future as a result of subsequent shifts in our stock ownership. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards and other pre-change tax attributes to offset U.S. federal and state taxable income may be subject to limitations, which could potentially result in increased future tax liability to us.

Risks Related to the Discovery and Development of Our Product Candidates

Our discovery and preclinical development is focused on the development of targeted therapeutics for patients with genetically defined cancers, which is a rapidly evolving area of science, and the approach we are taking to discover and develop drugs is novel and may never lead to marketable products.

The discovery and development of targeted drug therapeutics for patients with genetically defined cancers is an emerging field, and the scientific discoveries that form the basis for our efforts to discover and develop product candidates are relatively new. The scientific evidence to support the feasibility of developing product

candidates based on these discoveries is both preliminary and limited. The patient populations for our product candidates are not completely defined but are substantially smaller than the general treated cancer population, and we will need to screen and identify these patients. Successful identification of patients is dependent on several factors, including achieving certainty as to how specific genetic alterations respond to our product candidates and developing companion diagnostics to identify such genetic alterations. Furthermore, even if we are successful in identifying patients, we cannot be certain that the resulting patient populations will be large enough to allow us to successfully commercialize our products and achieve profitability. Therefore, we do not know if our approach of treating patients with genetically defined cancers will be successful, and if our approach is unsuccessful, our business will suffer.

Our research and development programs and product candidates are at an early stage of development. As a result we are unable to predict if or when we will successfully develop or commercialize our product candidates.

Our clinical-stage product candidate, tipifarnib, as well as our other pipeline assets are at an early stage of development and will require significant investment and regulatory approvals prior to commercialization. We currently have no product candidates beyond Phase 2 clinical trials. We commenced a Phase 2 clinical trial of tipifarnib in advanced solid tumors with the HRAS mutation in May 2015 and anticipate commencing a Phase 2 clinical trial in peripheral T-cell lymphoma in the third quarter of 2015. Our lead candidate in our ERK program, KO-947, is in IND-enabling pre-clinical development, and our backup compounds in the ERK program as well as our other programs, including our Menin-MLL program, are in earlier stages of development. Each of our product candidates will require additional clinical and preclinical development, management of clinical, preclinical and manufacturing activities, obtaining regulatory approval, obtaining manufacturing supply, building of a commercial organization, substantial investment and significant marketing efforts before we generate any revenues from product sales. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from the FDA or comparable foreign regulatory authorities, and we may never receive such regulatory approval for any of our product candidates. In addition, our product development programs contemplate the development of companion diagnostics. Companion diagnostics are subject to regulation as medical devices and we may be required to obtain marketing approval for accompanying companion diagnostics before we may commercialize our product candidates.

We cannot be certain that such clinical development of tipifarnib or any of our other product candidates will be successful or that we will obtain regulatory approval or be able to successfully commercialize any of our product candidates and generate revenue. Success in preclinical testing and early clinical trials does not ensure that later clinical trials will be successful, and the clinical trial process may fail to demonstrate that our product candidates are safe and effective for their proposed uses. Any such failure could cause us to abandon further development of any one or more of our product candidates and may delay development of other product candidates. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. Tipifarnib has been studied in more than 5,000 patients, including more than 600 patients at the dose and schedule we intend to use in our Phase 2 trials. At that dose and schedule, tipifarnib exhibited a manageable side effect profile and was generally well tolerated. In prior studies tipifarnib demonstrated anti-cancer activity in certain patient subsets. However the anti-cancer activity observed was not sufficient to support marketing approval by the FDA in the indication in which it was sought. Although we are designing our clinical trials to target the patient subsets who we believe are most likely to benefit from treatment with tipifarnib, there is no guarantee that our clinical trials will be successful. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Any delay in, or termination of, our clinical trials will delay and possibly preclude the filing of any new drug applications, or NDAs, with the FDA and, ultimately, our ability to commercialize our product candidates and generate product revenue.

We have not previously submitted an NDA to the FDA, or similar drug approval filings to comparable foreign authorities, for any product candidate, and we cannot be certain that any of our product candidates will

receive regulatory approval. Further, our product candidates may not receive regulatory approval even if they are successful in clinical trials. If we do not receive regulatory approvals for our product candidates, we may not be able to continue our operations. Even if we successfully obtain regulatory approvals to market one or more of our product candidates, our revenues will be dependent, in part, upon our or our future collaborators' ability to obtain regulatory approval of the companion diagnostics to be used with our product candidates, if required, as well as the size of the markets in the territories for which we gain regulatory approval and have commercial rights. If the markets for patient subsets that we are targeting are not as significant as we estimate, we may not generate significant revenues from sales of such products, if approved.

Difficulty in enrolling patients could delay or prevent clinical trials of our product candidates. We may find it difficult to enroll patients in our ongoing Phase 2 clinical trial for tipifarnib given that we do not know how many patients share the HRAS mutations tipifarnib is expected to inhibit.

Identifying and qualifying patients to participate in clinical studies of our product candidates is critical to our success. The timing of our clinical studies depends in part on the speed at which we can recruit patients to participate in testing our product candidates, and we may experience delays in our clinical trials if we encounter difficulties in enrollment. The patient population for our product candidates is not completely defined, but it is substantially smaller than other cancer indications, because we are looking for the same type of genetic alterations across different tumor types and the number of patients with these alterations may be small. For example, with respect to tipifarnib, we do not know how many patients will have the target HRAS mutations that tipifarnib is expected to inhibit.

In addition to the potentially small populations, the eligibility criteria of our clinical trials will further limit the pool of available study participants as we will require that patients have specific characteristics that we can measure or to assure their disease is either severe enough or not too advanced to include them in a study. Additionally, the process of finding and diagnosing patients may prove costly. We also may not be able to identify, recruit, and enroll a sufficient number of patients to complete our clinical studies because of the perceived risks and benefits of the product candidate under study, the availability and efficacy of competing therapies and clinical trials, the proximity and availability of clinical study sites for prospective patients, and the patient referral practices of physicians. If patients are unwilling to participate in our studies for any reason, the timeline for recruiting patients, conducting studies, and obtaining regulatory approval of potential products may be delayed.

If we experience delays in the completion of, or termination of, any clinical trial of our product candidates, the commercial prospects of our product candidates will be harmed, and our ability to generate product revenue from any of these product candidates could be delayed or prevented. In addition, any delays in completing our clinical trials will increase our costs, slow down our product candidate development and approval process, and jeopardize our ability to commence product sales and generate revenue. Any of these occurrences may harm our business, financial condition, and prospects significantly. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates, including:

- unforeseen safety issues or adverse side effects;
- failure of our companion diagnostics in identifying patients;
- modifications to protocols of our clinical trials resulting from FDA or institutional review board, or IRB, decisions; and
- ambiguous or negative interim results of our clinical trials, or results that are inconsistent with earlier results.

We may not be successful in our efforts to build a pipeline of product candidates.

A key element of our strategy is to build a pipeline of small molecule product candidates that inhibit cancer signaling targets where we believe outcomes can be improved by using molecular diagnostics to identify those patients whose tumors have the genetic mutations most likely to respond to treatment, and to progress those product candidates through clinical development for the treatment of a variety of different types of cancer. We may not be able to develop product candidates that are safe and effective inhibitors of all or any of these targets. Even if we are successful in building a product pipeline, the potential product candidates that we identify may not be suitable for clinical development for a number of reasons, including causing harmful side effects or demonstrating other characteristics that indicate a low likelihood of receiving marketing approval or achieving market acceptance. If our methods of identifying potential product candidates fail to produce a pipeline of potentially viable product candidates, then our success as a business will be dependent on the success of fewer potential product candidates, which introduces risks to our business model and potential limitations to any success we may achieve.

Clinical drug development involves a lengthy and expensive process with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

The risk of failure for all of our product candidates is high. Before obtaining marketing approval from regulatory authorities for the sale of any product candidate, we must complete preclinical development and 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 and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. Further, the results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and 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. For instance, the FDA issued a non-approval letter for tipifarnib in acute myelogenous leukemia, in June 2005. It is impossible to predict when or if any of our product candidates will prove effective or safe in humans or will receive regulatory approval.

We may experience delays in our clinical trials and we do not know whether planned clinical trials will begin or enroll patients on time, need to be redesigned or be completed on schedule, if at all. If the FDA has comments on our study plan for our planned Phase 2 clinical trial of tipifarnib in patients with peripheral T-cell lymphoma that we are required to address, the initiation of the second Phase 2 study may be delayed. There can be no assurance that the FDA will not put any of our product candidates on clinical hold in the future. We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize our product candidates. Clinical trials may be delayed, suspended or prematurely terminated because costs are greater than we anticipate or for a variety of reasons, such as:

- delay or failure in reaching agreement with the FDA or a comparable foreign regulatory authority on a trial design that we are able to execute;
- delay or failure in obtaining authorization to commence a trial or inability to comply with conditions imposed by a regulatory authority regarding the scope or design of a clinical trial;
- delays in reaching, or failure to reach, agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;
- inability, delay, or failure in identifying and maintaining a sufficient number of trial sites, many of which may already be engaged in other clinical programs;
- delay or failure in recruiting and enrolling suitable subjects to participate in a trial;

- delay or failure in having subjects complete a trial or return for post-treatment follow-up;
- clinical sites and investigators deviating from trial protocol, failing to conduct the trial in accordance with regulatory requirements, or dropping out of a trial;
- lack of adequate funding to continue the clinical trial, including the incurrence of unforeseen costs due to enrollment delays, requirements to conduct additional clinical studies and increased expenses associated with the services of our CROs and other third parties;
- 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;
- we may experience delays or difficulties in the enrollment of patients whose tumors harbor the specific genetic alterations that our product candidates are designed to target;
- 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;
- we may have difficulty partnering with experienced CROs that can screen for patients whose tumors harbor the applicable genetic alterations and run our clinical trials effectively;
- regulators or IRBs 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 supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate; or
- there may be changes in governmental regulations or administrative actions.

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 that would reduce the potential market for our products or inhibit our ability to successfully commercialize our products;
- be subject to additional post-marketing restrictions and/or testing requirements; or
- have the product removed from the market after obtaining marketing approval.

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

We may not be successful in advancing the clinical development of our product candidates, including tipifarnib.

In order to execute on our strategy of advancing the clinical development of our product candidates, we have designed our Phase 2 clinical trials of tipifarnib, and expect to design future trials, to include patients whose tumors harbor the applicable genetic alterations that we believe contribute to particular cancer subsets. Our goal in doing this is to enroll patients who have the highest probability of responding to the drug, in order to show early and statistically significant evidence of clinical efficacy. If we are unable to include patients whose tumors harbor the applicable genetic alterations, or if our product fails to work as we expect, our ability to assess the therapeutic effect, seek participation in FDA expedited review and approval programs, including Breakthrough Therapy, Fast Track Designation, Priority Review and Accelerated Approval, or otherwise to seek to accelerate clinical development and regulatory timelines, could be compromised, resulting in longer development times, larger trials and a greater likelihood of not obtaining regulatory approval. In addition, because the natural history of different tumor types is variable, we will need to study our product candidates, including tipifarnib, in clinical trials specific for a given tumor type and this may result in increased time and cost. Even if our product candidate demonstrates efficacy in a particular tumor type, we cannot guarantee that any product candidate, including tipifarnib, will behave similarly in all tumor types, and we will be required to obtain separate regulatory approvals for each tumor type we intend a product candidate to treat. If any of our clinical trials are unsuccessful, our business will suffer.

Preclinical and clinical testing of tipifarnib that has been conducted to date may not have been performed in compliance with applicable regulatory standards, which could lead to increased costs or material delays for their further development.

We have only recently licensed the rights to develop our lead product candidate, tipifarnib, from Janssen Pharmaceutica NV, or Janssen, and the development of tipifarnib prior to our license was conducted wholly by Janssen or any third parties with which it had contracted. As a result, we were not involved with nor did we have any control over any of those development activities. Because we had no input on Janssen's development activities relating to tipifarnib, we may discover that all or certain elements of the trials and studies it performed have not been in compliance with applicable regulatory standards or have otherwise been deficient, particularly relative to current requirements as development of tipifarnib began in the 1990's. Any such deficiency in the prior development of tipifarnib may adversely affect our ability to obtain regulatory approval for tipifarnib. We and Janssen are in the process of transitioning the development program documentation and databases from studies previously conducted by Janssen to us. We cannot assure you that our efforts to transition all of the necessary documentation from Janssen will be completed on a timely basis, or at all. If we are unable to successfully complete the transition of Janssen's tipifarnib development documentation and database to us on a timely basis, our development plans may be delayed, which could harm our business, prospects, financial condition and results of operations.

If serious adverse events or unacceptable side effects are identified during the development of our product candidates, we may need to abandon or limit our development of some of our product candidates.

If our product candidates are associated with undesirable side effects in preclinical or clinical trials or have characteristics that are unexpected, we may need to interrupt, delay or abandon their development or limit development to more narrow 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. Tipifarnib has been studied in more than 5,000 patients, including more than 600 patients at the dose and schedule we intend to use in our Phase 2 trials. At that dose and schedule, tipifarnib exhibited a manageable side effect profile and was generally well tolerated. The most common hematologic adverse events of any grade were neutropenia (low white blood cell count), anemia and thrombocytopenia (low platelet count). The most common non-hematologic adverse events of any grade were gastrointestinal system disorders (nausea, anorexia, diarrhea and vomiting, and abdominal pain), fatigue and fever.

Treatment discontinuation with this regimen was approximately 20%. There is no guarantee that additional or more severe side effects will not be identified through further clinical studies. Rights to develop tipifarnib in certain non-oncology indications have been granted by Janssen to EB Pharma, a subsidiary of Eiger BioPharmaceuticals. Janssen may grant rights to other non-oncology indications to other third parties. Undesirable side effects may be identified in clinical trials that EB Pharma or any other third party may conduct in non-oncology indications, which may negatively impact the development, commercialization or potential value of tipifarnib. These or other drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Many compounds developed in the biopharmaceutical industry that initially showed promise in early-stage testing for treating cancer have later been found to cause side effects that prevented further development of the compound. Any of these occurrences may harm our business, financial condition and prospects significantly.

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.

Because we have limited financial and managerial resources, we must focus on a limited number of research programs and product candidates and on specific indications. 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 discovery and preclinical development programs and product candidates for specific indications may not yield any commercially viable products.

Failure to successfully validate, develop and obtain regulatory approval for companion diagnostics for our product candidates could harm our drug development strategy and operational results.

As one of the central elements of our business strategy and clinical development approach, we seek to screen and identify subsets of patients with a genetic alteration who may derive meaningful benefit from our development product candidates. To achieve this, certain of our product development programs may be dependent on the development and commercialization of a companion diagnostic by us or by third party collaborators. Companion diagnostics are developed in conjunction with clinical programs for the associated product and are subject to regulation as medical devices. Each agency that approves a product will independently need to approve the companion diagnostic before or concurrently with its approval of the product candidate, and before a product can be commercialized. The approval of a companion diagnostic as part of the product label will limit the use of the product candidate to only those patients who express the specific genetic alteration it was developed to detect. We may also experience delays in developing a sustainable, reproducible and scalable manufacturing process or transferring that process to commercial partners or negotiating insurance reimbursement plans, all of which may prevent us from completing our clinical trials or commercializing our products on a timely or profitable basis, if at all.

Companion diagnostics are subject to regulation by the FDA and comparable foreign regulatory authorities as medical devices and require separate clearance or approval prior to their commercialization. To date, the FDA has required premarket approval of all companion diagnostics for cancer therapies. We and our third-party collaborators may encounter difficulties in developing and obtaining approval for these companion diagnostics. Any delay or failure by us or third- party collaborators to develop or obtain regulatory approval of a companion diagnostic could delay or prevent approval of our related product candidates.

Failure by us or our third-party collaborators to successfully commercialize companion diagnostics developed for use with our product candidates could harm our ability to commercialize these product candidates.

Even if we or our companion diagnostic collaborators successfully obtain regulatory approval for the companion diagnostics for our product candidates, our collaborators:

- may not perform their obligations as expected;

- may not pursue commercialization of companion diagnostics for our therapeutic product candidates that achieve regulatory approval;
- may elect not to continue or renew commercialization programs based on changes in the collaborators' strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities;
- may not commit sufficient resources to the marketing and distribution of such product or products; and
- may terminate their relationship with us.

Additionally, we or our collaborators may encounter production difficulties that could constrain the supply of the companion diagnostics, affect the ease of use, affect the price or have difficulties gaining acceptance of the use of the companion diagnostics in the clinical community.

If companion diagnostics for use with our product candidates fail to gain market acceptance, our ability to derive revenues from sales of our product candidates could be harmed. If we or our collaborators fail to commercialize these companion diagnostics, we may not be able to enter into arrangements with another diagnostic company to obtain supplies of an alternative diagnostic test for use in connection with our product candidates or do so on commercially reasonable terms, which could adversely affect and delay the development or commercialization of our product candidates.

Risks Related to Regulatory Approval of Our Product Candidates and Other Legal Compliance Matters

If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals, we will not be able to commercialize our product candidates, and our ability to generate revenue will be materially impaired.

Our product candidates must be approved by the FDA pursuant to an NDA in the United States and by the European Medicines Agency, or EMA, and similar regulatory authorities outside the United States prior to commercialization. The process of obtaining marketing approvals, both in the United States and abroad, is expensive and takes many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate. We have not received approval to market any of our product candidates from regulatory authorities in any jurisdiction. We have no experience in filing and supporting the applications necessary to gain marketing approvals and expect to rely on third-party CROs to assist us in this process. Securing marketing approval requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the regulatory authorities. Our product candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a product candidate. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may also cause delays in or prevent the approval of an application.

If we experience delays in obtaining approval or if we fail to obtain approval of our product candidates, the commercial prospects for our product candidates may be harmed and our ability to generate revenues will be materially impaired.

We may not be able to benefit from available regulatory exclusivity periods if another company obtains regulatory approval for tipifarnib before we do.

As the composition of matter patents covering tipifarnib expire in 2016 in the United States and in countries in Europe, our commercial strategy for tipifarnib relies on obtaining patents covering methods of use of tipifarnib and on non-patent regulatory exclusivity. In the United States, a pharmaceutical manufacturer may obtain five years of non-patent exclusivity upon FDA approval of an NDA for a new chemical entity, or NCE, which is a drug that contains an active moiety that has not been approved by the FDA in any other NDA. An "active moiety" is defined as the molecule or ion responsible for the drug substance's physiological or pharmacologic action. During the five year exclusivity period, the FDA cannot accept for filing any ANDA seeking approval of a generic version of that drug or any Section 505(b)(2) NDA for the same active moiety and that relies on the FDA's findings regarding that drug, except that the FDA may accept an application for filing after four years if the follow-on applicant makes a paragraph IV certification. EB Pharma has licensed rights from Janssen to develop tipifarnib in certain indications outside of our exclusive field of oncology and Janssen may license rights to other non-oncology indications to other third parties. If EB Pharma or another third party obtains regulatory approval for tipifarnib in a non-oncology indication before we obtain regulatory approval in one of our oncology indications, the five year exclusivity period would commence on the date upon which EB Pharma or another third party obtains regulatory approval, and as a result, the period of regulatory exclusivity to which we may be entitled may be reduced or eliminated and the commercial prospects for tipifarnib would be harmed as a result.

Additionally, if EB Pharma or another third party obtains approval of tipifarnib for another indication outside of oncology, EB Pharma or the other third party may sell tipifarnib at a lower price, which could adversely affect the price at which we could sell tipifarnib for oncology indications.

We may not be able to obtain orphan drug exclusivity for the product candidates for which we seek it, which could limit the potential profitability of such product candidates.

Regulatory authorities in some jurisdictions, including the United States and Europe, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals in the United States. Generally, if a product with an orphan drug designation subsequently receives the first marketing approval for the indication for which it receives the designation, then the product is entitled to a period of marketing exclusivity that precludes the applicable regulatory authority from approving another marketing application for the same drug for the same indication during the exclusivity period. The applicable period is seven years in the United States and ten years in Europe. The European exclusivity period can be reduced to six years if a drug no longer meets the criteria for Orphan Drug Designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. Orphan Drug Exclusivity may be lost if the FDA or EMA determines that the request for designation was materially defective, if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition.

We expect that we may in the future pursue an orphan drug designation for at least some of our product candidates, including tipifarnib. However, obtaining an orphan drug designation can be difficult, and we may not be successful in doing so for any of our product candidates. Even if we were to obtain orphan drug exclusivity for a product candidate, that exclusivity may not effectively protect the product from the competition of different drugs for the same condition, which could be approved during the exclusivity period. Additionally, after an orphan drug is approved, the FDA could subsequently approve another application for the same drug for the same condition if the FDA concludes that the later drug is shown to be safer, more effective or makes a major contribution to patient care. The failure to obtain an orphan drug designation for any product candidates we may develop for the treatment of rare cancers, and/or the inability to maintain that designation for the duration of the applicable exclusivity period, could reduce our ability to make sufficient sales of the applicable product candidate to balance our expenses incurred to develop it, which would have a negative impact on our operational results and financial condition.

If we obtain an orphan drug designation and FDA approval of tipifarnib for an oncology indication, we would be entitled to seven years of marketing exclusivity for that orphan drug indication. However, if a competitor obtained approval of a generic form of tipifarnib for another indication, physicians would not be prevented from prescribing the generic drug for the orphan indication during the period of marketing exclusivity. Such prescribing practices could adversely affect the sales of tipifarnib for the orphan indication.

A Fast Track Designation by the FDA, even if granted for any of our product candidates, may not lead to a faster development or regulatory review or approval process and does not increase the likelihood that our product candidates will receive marketing approval.

We do not currently have Fast Track Designation for any of our product candidates but intend to seek such designation. If a drug is intended for the treatment of a serious or life-threatening condition and the drug demonstrates the potential to address unmet medical needs for this condition, the drug sponsor may apply for the FDA Fast Track Designation. The FDA has broad discretion whether or not to grant this designation. Even if we believe a particular product candidate is eligible for this designation, we cannot assure you that the FDA would decide to grant it. Even if we do receive Fast Track Designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw Fast Track Designation if it believes that the designation is no longer supported by data from our clinical development program. Many drugs that have received Fast Track Designation have failed to obtain drug approval.

A Breakthrough Therapy Designation by the FDA, even if granted for any of our product candidates, may not lead to a faster development or regulatory review or approval process, and does not increase the likelihood that our product candidates will receive marketing approval.

We do not currently have Breakthrough Therapy Designation for any of our product candidates, but we may seek such designation. A Breakthrough Therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For drugs that have been designated as Breakthrough Therapies, interaction and communication between the FDA and the sponsor can help to identify the most efficient path for development.

Designation as a Breakthrough Therapy is within the discretion of the FDA. Accordingly, even if we believe, after completing early clinical trials, that one of our product candidates meets the criteria for designation as a Breakthrough Therapy, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of a Breakthrough Therapy designation for a product candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if one or more of our product candidates qualify as Breakthrough Therapies, the FDA may later decide that such product candidates no longer meet the conditions for qualification and rescind such designations.

Failure to obtain marketing approval in international jurisdictions would prevent our product candidates from being marketed abroad.

In order to market and sell our products in the European Union and many other jurisdictions, we or our third-party collaborators must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, it is required that the product be approved for reimbursement before the product can be approved for sale in that country. We or our third-party collaborators may not obtain approvals from regulatory authorities outside the United States on a timely basis, if

at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. We may not be able to file for marketing approvals and may not receive necessary approvals to commercialize our products in any market.

Any product candidate for which we obtain marketing approval will be subject to extensive post-marketing regulatory requirements and could be subject to post-marketing restrictions or withdrawal from the market, and we may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, when and if any of them are approved.

Our product candidates and the activities associated with their development and commercialization, including their testing, manufacture, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by FDA and other regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, current good manufacturing practices, or cGMP, requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, including periodic inspections by the FDA and other regulatory authorities, requirements regarding the distribution of samples to physicians and recordkeeping.

The FDA may also impose requirements for costly post-marketing studies or clinical trials and surveillance to monitor the safety or efficacy of the product. The FDA closely regulates the post-approval marketing and promotion of drugs to ensure drugs are marketed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA imposes stringent restrictions on manufacturers' communications regarding use of their products and if we promote our products beyond their approved indications, we may be subject to enforcement action for off-label promotion. Violations of the Federal Food, Drug, and Cosmetic Act relating to the promotion of prescription drugs may lead to investigations alleging violations of federal and state healthcare fraud and abuse laws, as well as state consumer protection laws.

In addition, later discovery of previously unknown adverse events or other problems with our products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including:

- restrictions on such products, manufacturers or manufacturing processes;
- restrictions on the labeling or marketing of a product;
- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning or untitled letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- refusal to permit the import or export of our products;
- product seizure; or
- injunctions or the imposition of civil or criminal penalties.

Non-compliance with European Union requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population, can also result in significant financial penalties. Similarly, failure to comply with the European Union's requirements regarding the protection of personal information can also lead to significant penalties and sanctions.

Our relationships with customers and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute any products for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations include the following:

- the federal Anti-Kickback Statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid;
- the federal False Claims Act imposes criminal and civil penalties, including civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- federal law requires applicable manufacturers of covered drugs to report payments and other transfers of value to physicians and teaching hospitals, which includes data collection and reporting obligations; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers.

Some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government and may require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures. State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant

civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion of products from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

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

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidates for which we obtain marketing approval.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and introduced a new reimbursement methodology based on average sales prices for physician-administered drugs. In addition, this legislation provided authority for limiting the number of drugs that will be covered in any therapeutic class. Cost reduction initiatives and other provisions of this legislation could decrease the coverage and price that we receive for any approved products. While the MMA only applies to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the MMA may result in a similar reduction in payments from private payors.

In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively the ACA, a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for the healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms.

Among the provisions of the ACA of importance to our potential product candidates are the following:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program;
- expansion of healthcare fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers, and enhanced penalties for noncompliance;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices;
- extension of manufacturers' Medicaid rebate liability;
- expansion of eligibility criteria for Medicaid programs;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- new requirements to report financial arrangements with physicians and teaching hospitals;
- a new requirement to annually report drug samples that manufacturers and distributors provide to physicians; and
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. These changes included aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding.

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

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

Governments outside the United States tend to impose strict price controls, which may adversely affect our revenues, if any.

In some countries, particularly the countries of the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. If reimbursement for our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be harmed, possibly materially.

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 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 for failure to comply with such laws and regulations.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of 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, 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 discovery, preclinical development or production efforts. Our 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 expect to rely on third-party contractors and organizations to conduct our clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials.

We will rely on third party contractors, clinical data management organizations, independent contractors, medical institutions and clinical investigators to support our pre-clinical development activities and conduct our clinical trials, including our Phase 2 clinical trials of tipifarnib. These agreements may terminate for a variety of reasons, including a failure to perform by the third parties. If we are required to enter into alternative arrangements, our product development activities would be delayed.

We compete with many other companies, some of which may be our competitors, for the resources of these third parties. Large pharmaceutical companies often have significantly more extensive agreements and relationships with such third-party providers, and such third-party providers may prioritize the requirements of such large pharmaceutical companies over ours. The third parties on whom we rely may terminate their engagements with us at any time, which may cause delay in the development and commercialization of our product candidates. If any such third party terminates its engagement with us or fails to perform as agreed, we may be required to enter into alternative arrangements, which would result in significant cost and delay to our product development program. Moreover, our agreements with such third parties generally do not provide assurances regarding employee turnover and availability, which may cause interruptions in the research on our product candidates by such third parties.

Our reliance on these third parties to conduct our clinical trials 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 and other regulatory authorities require us to comply with standards, commonly referred to as good clinical practices, or GCPs, 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 are also required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within specified timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Additionally, we expect to rely substantially on third-party data managers for our clinical trial data. There is no assurance that these third parties will not make errors in the design, management or retention of our data or data systems. There is no assurance that these third parties will pass FDA or other regulatory audits, which could delay or prevent regulatory approval.

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.

We will depend on third parties for the manufacture of our product candidates for preclinical and clinical testing and expect to continue to do so for commercialization. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or products at an acceptable cost and quality, which could delay, prevent or impair our development or commercialization efforts.

We do not own or operate facilities for the manufacture of our product candidates, and we do not have any manufacturing personnel. We currently have no plans to build our own clinical or commercial scale

manufacturing capabilities. Janssen has provided us with its existing inventory of clinical supply of tipifarnib. Janssen also provided us with its existing inventory of crude drug substance and bulk key intermediate for manufacture of drug substance for tipifarnib. A portion of the clinical supply of tablets of tipifarnib provided by Janssen have a non-uniform surface where the film coating on the tablets has worn away to a varying degree. We believe this surface erosion is a cosmetic defect only and has no impact on patient safety or the effectiveness of the tablets, and an insignificant impact on taste masking, and that this clinical supply will support our ongoing and planned Phase 2 clinical trials for tipifarnib. However there is no guarantee that clinical trial participants will accept all the tablets and that our existing clinical supply will be sufficient for our ongoing and planned Phase 2 clinical trials or for any unanticipated extension of our Phase 2 clinical trials. If we are required to manufacture additional clinical supplies our Phase 2 clinical trials may be delayed. We rely, and expect to continue to rely, on third parties, for the manufacture of our other product candidates for preclinical and clinical testing. We will rely on third parties as well for commercial manufacture if any of our product candidates receive marketing approval. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or products or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts. We also expect to rely on other third parties to store and distribute drug supplies for our clinical trials.

We also expect to rely on third-party manufacturers or third-party collaborators for the manufacture of commercial supply of any other product candidates for which our collaborators or we obtain marketing approval.

Any performance failure on the part of our existing or future manufacturers or distributors could delay clinical development or marketing approval of our product candidates or commercialization of our products, producing additional losses and depriving us of potential product revenue.

We may be unable to establish any 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;
- the possible misappropriation of our proprietary information, including our trade secrets and know-how; 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 cGMP regulations 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 clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our products.

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

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 products that receive marketing approval on a timely and competitive basis.

Risks Related to the Commercialization of Our Product Candidates

Even if any of our product candidates receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success.

If any of our product candidates receives marketing approval, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. For example, current cancer treatments like chemotherapy and radiation therapy are well established in the medical community, and doctors may continue to rely on these treatments to the exclusion of our product candidates. In addition, physicians, patients and third-party payors may prefer other novel products to ours. If our product candidates do not achieve an adequate level of acceptance, we may not generate significant product revenues and we may not 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 safety and potential advantages and disadvantages compared to alternative treatments;
- our ability to offer our products for sale at competitive prices;
- the convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of our marketing and distribution support;
- the availability of third-party coverage and adequate reimbursement, including patient cost-sharing programs such as copays and deductibles;
- our ability to develop or partner with third-party collaborators to develop companion diagnostics;
- the prevalence and severity of any side effects; and
- any restrictions on the use of our products together with other medications.

We currently have no marketing and sales force. If we are unable to establish effective sales or marketing capabilities or enter into agreements with third parties to sell or market our product candidates if they obtain regulatory approval, we may not be able to effectively sell or market our product candidates, if approved, or generate product revenues.

We currently do not have a marketing or sales team for the marketing, sales and distribution of any of our product candidates that are able to obtain regulatory approval. In order to commercialize any product candidates, we must build on a territory-by-territory basis marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services, and we may not be successful in doing so. If our product candidates receive regulatory approval, we intend to establish an internal sales or marketing team with technical expertise and supporting distribution capabilities to commercialize our product candidates, which will be expensive and time consuming and will require significant attention of our executive officers to manage. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of any of our products that we obtain approval to market. With respect to the commercialization of all or certain of our product candidates, we may choose to collaborate, either globally or on a territory-by-territory basis, with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. If we are unable to enter into such arrangements when needed on acceptable terms or at all, we may not be able to successfully commercialize any of our product candidates that receive regulatory approval or any such commercialization may experience delays or limitations. If we are not successful in commercializing our product candidates, either on our own or through collaborations with one or more third parties, our future product revenue will suffer and we may incur significant additional losses.

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

The development and commercialization of new drug products is highly competitive. 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 disease indications for which we are developing our product candidates. 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.

Specifically, there are a large number of companies developing or marketing treatments for cancer, including many major pharmaceutical and biotechnology companies, which may directly compete with tipifarnib, KO-947 and any future product candidates. See “Description of Our Business—Competition.”

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly 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 and or slow our regulatory approval. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of generic products. Generic products are currently on the market for the indications that we are pursuing, and additional products are expected to become available on a generic basis over the coming years. If our product candidates achieve marketing approval, we expect that they will be priced at a significant premium over competitive generic products.

Many of the companies against which we are competing or against which we may compete in the future 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 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.

The insurance coverage and reimbursement status of newly-approved products is uncertain. Failure to obtain or maintain adequate coverage and reimbursement for new or current products could limit our ability to market those products and decrease our ability to generate revenue.

The availability and extent of reimbursement by governmental and private payors is essential for most patients to be able to afford expensive treatments. Sales of our product candidates will depend substantially, both domestically and abroad, on the extent to which the costs of our product candidates will be paid by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or reimbursed by government health administration authorities, private health coverage insurers and other third-party payors. If reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize a sufficient return on our investment.

There is significant uncertainty related to the insurance coverage and reimbursement of newly approved products. In the United States, the principal decisions about reimbursement for new medicines are typically made by the Centers for Medicare & Medicaid Services, or CMS, an agency within the U.S. Department of Health and Human Services, as CMS decides whether and to what extent a new medicine will be covered and reimbursed under Medicare. Private payors tend to follow CMS to a substantial degree. It is difficult to predict what CMS will decide with respect to reimbursement for fundamentally novel products such as ours, as there is no body of established practices and precedents for these new products. Reimbursement agencies in Europe may be more conservative than CMS. For example, a number of cancer drugs have been approved for reimbursement in the United States and have not been approved for reimbursement in certain European countries. Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost-containment initiatives in Europe, Canada, and other countries has and will continue to put pressure on the pricing and usage of our product candidates. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. In general, the prices of medicines under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for medicines, but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our product candidates. Accordingly, in markets outside the United States, the reimbursement for our products may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenues and profits.

Moreover, increasing efforts by governmental and third-party payors, in the United States and abroad, to cap or reduce healthcare costs may cause such organizations to limit both coverage and level of reimbursement for new products approved and, as a result, they may not cover or provide adequate payment for our product candidates. We expect to experience pricing pressures in connection with the sale of any of our product candidates, due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products into the healthcare market.

In addition to CMS and private payors, professional organizations such as the National Comprehensive Cancer Network and the American Society of Clinical Oncology can influence decisions about reimbursement for new medicines by determining standards for care. In addition, many private payors contract with commercial vendors who sell software that provide guidelines that attempt to limit utilization of, and therefore reimbursement for, certain products deemed to provide limited benefit to existing alternatives. Such organizations may set guidelines that limit reimbursement or utilization of our products.

Product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of any products that 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. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

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

- loss of revenue;
- reduced resources of our management to pursue our business strategy; and
- the inability to commercialize any products that we may develop.

Our current product liability insurance coverage may not be adequate to cover all liabilities that we may incur. We may need to increase our insurance coverage as we expand our clinical trials or if we commence commercialization of our product candidates. 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.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain intellectual property protection for our technology and products, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and products may be impaired.

We intend to rely upon a combination of regulatory exclusivity periods, patents, trade secret protection, confidentiality agreements, and license agreements to protect the intellectual property related to our current product candidates and development programs. If the breadth or strength of protection provided by any patents, patent applications or future patents we may own, license, or pursue with respect to any of our current or future product candidates or products is threatened, it could threaten our ability to commercialize any of our current or future product candidates or products. Further, if we encounter delays in our development efforts, the period of time during which we could market any of our current or future product candidates or products under any patent protection we obtain would be reduced. Given the amount of time required for the development, testing and regulatory review of new product candidates or products, patents protecting such candidates might expire before or shortly after such product candidates or products are commercialized.

Our patent rights may not protect our patent protected products and product candidates if competitors devise ways of making products that compete with us without legally infringing our patent rights. For example, our patent rights in tipifarnib are limited in ways that affect our ability to exclude third parties from competing against us. In particular, the patent term for the composition of matter patents covering the active pharmaceutical ingredient, or API, of tipifarnib expire in 2016 in the United States, countries in Europe and other jurisdictions. Composition of matter patents on APIs are generally considered to be the strongest form of intellectual property protection because such patents provide protection without regard to any particular method of use or manufacture or formulation of the API used. Patent term extension may be available in the US to account for regulatory delays in obtaining human marketing approval for tipifarnib however, only one patent may be extended per marketed compound. Under our license agreement with Janssen, we and Janssen agree to cooperate in obtaining available patent term extensions. We and Janssen may not reach agreement and no patent term extension may be obtained. Additionally, the applicable authorities, including the U.S. Patent and Trademark Office, or U.S. PTO, and the FDA, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to patents, or may grant more limited extensions than requested. If this occurs, our competitors who obtain the requisite regulatory approval can offer products with the same API as tipifarnib so long as the competitors do not infringe any method of use or formulations patents that we may hold. Competitors may take advantage of our investment in development and trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case.

We expect that following expiration of composition of matter patents and any regulatory exclusivity we are able to obtain, competitors may manufacture and sell generic versions of tipifarnib, at a lower price, which would reduce tipifarnib’s revenues. In certain jurisdictions, legislation mandates generic substitution for brand name drugs.

We depend on our licensors to prosecute and maintain patents and patent applications that are material to our business. Any failure by our licensors to effectively protect these intellectual property rights could adversely impact our business and operations.

We have licensed patent rights from third parties for some of our development programs, including tipifarnib from Janssen and compounds in our Menin-MLL program from the University of Michigan. As a licensee of third parties, we rely on these third parties to file and prosecute patent applications and maintain patents and otherwise protect the licensed intellectual property under some of our license agreements. We have not had and do not have primary control over these activities for certain of our patents or patent applications and other intellectual property rights. We cannot be certain that such activities by third parties have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents or other intellectual property rights. Pursuant to the terms of the license agreements with some of our licensors, the licensors may have the right to control enforcement of our licensed patents or defense of any claims asserting the invalidity of these patents and even if we are permitted to pursue such enforcement or defense, we will require the cooperation of our licensors. We cannot be certain that our licensors will allocate sufficient resources or prioritize their or our enforcement of such patents or defense of such claims to protect our interests in the licensed patents. Even if we are not a party to these legal actions, an adverse outcome could harm our business because it might prevent us from continuing to license intellectual property that we may need to operate our business.

With respect to the patent portfolio for tipifarnib, which is in-licensed from Janssen, Janssen maintains rights to prosecute and maintain patents and patent applications within the portfolio as well as to assert such patents against infringers within and outside the scope of our license, and to defend such patents against claims of invalidity and unenforceability. Although we have rights to consult with Janssen on actions taken as well as back-up rights of prosecution and enforcement, rights to tipifarnib granted to another licensee, such as EB Pharma, could potentially influence Janssen's interests in the exercise of its prosecution, maintenance and enforcement rights in a manner that may favor the interests of such other licensee as compared with us.

If we breach any of the agreements under which we license from third parties the commercialization rights to our product candidates, we could lose license rights that are important to our business and our operations could be materially harmed.

We have in-licensed from Janssen the use, development and commercialization rights in oncology indications for our lead product candidate, tipifarnib. We have also in-licensed rights to potential product candidates in other programs in our pipeline. As a result, our current business plans are dependent upon our satisfaction of certain conditions to the maintenance of the Janssen agreement and the rights we license under it and our other in-license agreements. The Janssen license agreement provides that we are subject to diligence obligations relating to the commercialization and development of tipifarnib, milestone payments, royalty payments and other obligations. If we fail to comply with any of the conditions or obligations or otherwise breach the terms of our license agreement with Janssen, or any of our other license agreements or license agreements we may enter into on which our business or product candidates are dependent, Janssen or other licensors may have the right to terminate the applicable agreement in whole or in part and thereby extinguish our rights to the licensed technology and intellectual property and/or any rights we have acquired to develop and commercialize certain product candidates, including, with respect to our license agreement with Janssen, tipifarnib. The loss of the rights licensed to us under our license agreement with Janssen, or our other license agreements or any future license agreement that we may enter granting us rights on which our business or product candidates are dependent, would eliminate our ability to further develop the applicable product candidates and would materially harm our business, prospects, financial condition and results of operations.

The patent applications of pharmaceutical and biotechnology companies involve highly complex legal and factual questions, which, if determined adversely to us, could negatively impact our patent position.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. In addition, the laws

of foreign countries may not protect our rights to the same extent as the laws of the United States. For example, India and China do not allow patents for methods of treating the human body. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted and may also affect patent litigation. The U.S. PTO recently developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, only became effective on March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition.

Moreover, we may be subject to a third-party preissuance submission of prior art to the U.S. PTO, or become involved in opposition, derivation, reexamination, inter partes review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

Even if our owned and licensed patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our owned or licensed patents by developing similar or alternative technologies or products in a non-infringing manner.

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

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

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the U.S. PTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and/or applications. We have systems in place to remind us to pay these fees, and we employ an outside firm and rely on our outside counsel to pay these fees due to non-U.S. patent agencies. The U.S. PTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time consuming and unsuccessful.

Because competition in our industry is intense, competitors may infringe or otherwise violate our issued patents, patents of our licensors or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents. In addition, in a patent infringement proceeding, a court may decide that a patent of ours is invalid or unenforceable, in whole or in part, construe the patent's claims narrowly or refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated or interpreted narrowly. We may also elect to enter into license agreements in order to settle patent infringement claims or to resolve disputes prior to litigation, and any such license agreements may require us to pay royalties and other fees that could be significant. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure.

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our commercial success depends upon our ability, and the ability of our collaborators, to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing the proprietary rights of third parties. There is considerable intellectual property litigation in the biotechnology and pharmaceutical industries. We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our products and technology, including interference or derivation proceedings before the U.S. PTO. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future.

If we are found to infringe a third party's intellectual property rights, we could be required to obtain a license from such third party to continue developing and marketing our products and technology. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We could be forced, including by court order, to cease commercializing the infringing technology or product. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from

commercializing our product candidates or force us to cease some of our business operations, which could materially harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

We may not be successful in obtaining or maintaining necessary rights for our development pipeline through acquisitions and in-licenses.

Presently we have rights to intellectual property to develop tipifarnib in the field of oncology, including patents and patent applications we exclusively licensed from Janssen, as well as exclusive worldwide licenses for all therapeutic indications for certain compounds in our other programs, including in our Menin-MLL program. Because our programs may involve additional product candidates that may require the use of proprietary rights held by third parties, the growth of our business may depend in part on our ability to acquire, in-license or use these proprietary rights. Additionally, a companion diagnostic may require that we or a third-party collaborator developing the diagnostic acquire use or proprietary rights held by third parties. We may be unable to acquire or in-license any compositions, methods of use, or other third-party intellectual property rights from third parties that we identify. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire third-party intellectual property rights that we may consider attractive. These established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities.

For example, we may collaborate with U.S. and foreign academic institutions to accelerate our discovery and preclinical development work under written agreements with these institutions. Typically, these institutions provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such right of first negotiation for intellectual property, we may be unable to negotiate a license within the specified time frame or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our program.

In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment. If we are unable to successfully obtain rights to required third-party intellectual property rights, our business, financial condition and prospects for growth could suffer.

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

In addition to seeking patents for some of our technology and product candidates, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We seek to protect our confidential proprietary information, in part, by entering into confidentiality and invention or patent assignment agreements with our employees and consultants, however, we cannot be certain that such agreements have been entered into with all relevant parties. Moreover, to the extent we enter into such agreements, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed.

Risks Related to Employee Matters, Managing Growth and Macroeconomic Conditions

We currently have a limited number of employees, are highly dependent on our Chief Executive Officer and our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

We are an early-stage clinical development company with a limited operating history, and, as of May 31, 2015, we had only 20 employees. We are highly dependent on the expertise of Troy E. Wilson, our President and Chief Executive Officer, Antonio Gualberto, our Chief Medical Officer, Yi Liu, our Chief Scientific Officer, and Pingda Ren, our Senior Vice President, Chemistry and Pharmaceutical Sciences, as well as the other principal members of our management, scientific and clinical teams. Although we have entered into employment letter agreements with our executive officers, each of them may terminate their employment with us at any time. We do not maintain "key person" insurance for any of our executives or other employees. Additionally, Dr. Wilson currently also serves as President and Chief Executive Officer of Avidity Nanomedicines, LLC. As a result, Dr. Wilson is not able to devote all of his business time and attention to our business. Conflicts may arise in the future if there are competing demands on Dr. Wilson's time and attention and our business may be harmed as a result.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize products. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our discovery and preclinical development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

We expect to expand our development and regulatory capabilities and potentially implement sales, marketing and distribution capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of regulatory affairs and commercial, if any of our product candidates receives marketing approval, sales, marketing and distribution. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

Unfavorable global economic conditions could adversely affect our business, financial condition or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. The recent global financial crisis caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn, such as the recent global financial crisis, could

result in a variety of risks to our business, including our ability to raise additional capital when needed on acceptable terms, if at all. This is particularly true in Europe, which is undergoing a continued severe economic crisis. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

Our business and operations would suffer in the event of system failures.

Despite the implementation of security measures, our internal computer systems and those of our CROs, collaborators and third-parties on whom we rely are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we have not experienced any such system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our drug development programs. For example, the loss of clinical trial data from completed or ongoing or planned clinical trials could result in delays in our regulatory approval efforts and we may incur substantial costs to attempt to recover or reproduce the data. If any disruption or security breach resulted in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and/or the further development of our product candidates could be delayed.

Our operations are vulnerable to interruption by natural disasters, power loss, terrorist activity and other events beyond our control, the occurrence of which could materially harm our business.

Businesses located in California have, in the past, been subject to electrical blackouts as a result of a shortage of available electrical power, and any future blackouts could disrupt our operations. We are vulnerable to a major earthquake, wildfire and other natural disasters, and we have not undertaken a systematic analysis of the potential consequences to our business as a result of any such natural disaster and do not have an applicable recovery plan in place. We do not carry any business interruption insurance that would compensate us for actual losses from interruption of our business that may occur, and any losses or damages incurred by us could cause our business to materially suffer.

Risks Related to Ownership of our Common Stock

There is currently no market for our common stock and there can be no assurance that any market will ever develop. You may therefore be unable to re-sell shares of our common stock at times and prices that you believe are appropriate.

Our common stock is not listed on a national securities exchange, an over-the-counter market or any other exchange. Therefore, there is no trading market, active or otherwise, for our common stock and our common stock may never be included for trading on any stock exchange, automated quotation system or any over-the-counter market. Accordingly, our common stock is highly illiquid and you will likely experience difficulty in re-selling such shares at times and prices that you may desire.

Our common stock may not be eligible for listing or quotation on any securities exchange.

We do not currently meet the initial listing standards of any national securities exchange and our common stock is not quoted for sale on any over-the-counter trading system. We cannot assure you that we will be able to meet the initial listing standards of any national securities exchange, or, if we do meet such initial listing standards, that we will be able to maintain any such listing. Further, the national securities exchanges have adopted so-called “seasoning” rules that require that we meet certain requirements, including prescribed periods of time trading over-the-counter and minimum filings of periodic reports with the SEC, before we are eligible to apply for listing on such national securities exchanges. We intend to contact an authorized market maker for an over-the-counter quotation system for sponsorship of our common stock, but we cannot guarantee that such sponsorship will be approved and our common stock listed and quoted for sale. Even if our common stock is quoted for sale on an over-the-counter quotation system, buyers may be insufficient in numbers to allow for a

robust market and it may prove impossible to sell your shares. In addition, an investor may find it difficult to obtain accurate quotations as to the market value of our common stock. In addition, if we fail to meet the criteria set forth in SEC regulations, various requirements would be imposed by law on broker-dealers who sell our securities to persons other than established customers and accredited investors. Consequently, such regulations may deter broker-dealers from recommending or selling our common stock, which may further affect its liquidity. This would also make it more difficult for us to raise additional capital. Further, an unestablished trading market for our common stock may also impair our ability to raise capital by selling additional equity in the future, and may impair our ability to enter into strategic partnerships or acquire companies or products by using shares of our common stock as consideration.

The price of our common stock may be volatile and may be influenced by numerous factors, some of which are beyond our control.

If a market for our common stock develops, its market price could fluctuate substantially due to a variety of factors, some of which may be beyond our control. In addition to the factors discussed in this "Risk Factors" section and elsewhere in this prospectus, these factors include:

- the product candidates we seek to pursue, and our ability to obtain rights to develop, commercialize and market those product candidates;
- our decision to initiate a clinical trial, not to initiate a clinical trial or to terminate an existing clinical trial;
- actual or anticipated adverse results or delays in our clinical trials;
- our failure to commercialize our product candidates, if approved;
- unanticipated serious safety concerns related to the use of any of our product candidates;
- adverse regulatory decisions;
- additions or departures of key scientific or management personnel;
- changes in laws or regulations applicable to our product candidates, including without limitation clinical trial requirements for approvals;
- disputes or other developments relating to patents and other proprietary rights and our ability to obtain patent protection for our product candidates;
- our dependence on third parties, including CROs as well as our potential partners that produce companion diagnostic products;
- failure to meet or exceed any financial guidance or expectations regarding development milestones that we may provide to the public;
- actual or anticipated variations in quarterly operating results, liquidity or other indicators of our financial condition;
- failure to meet or exceed the estimates and projections of the investment community;
- overall performance of the equity markets and other factors that may be unrelated to our operating performance or the operating performance of our competitors, including changes in market valuations of similar companies;
- conditions or trends in the biotechnology and biopharmaceutical industries;
- introduction of new products offered by us or our competitors;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;

- our ability to maintain an adequate rate of growth and manage such growth;
- issuances of debt or equity securities;
- sales of our common stock by us or our stockholders in the future, or the perception that such sales could occur;
- trading volume of our common stock;
- ineffectiveness of our internal control over financial reporting or disclosure controls and procedures;
- general political and economic conditions;
- effects of natural or man-made catastrophic events; and
- other events or factors, many of which are beyond our control.

In addition, the stock market in general, and the stocks of small-cap biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. These events may also lead to securities litigation, which can be expensive and time-consuming to defend, regardless of the merit or outcome. The realization of any of the above risks or any of a broad range of other risks, including those described in these "Risk Factors," could have a dramatic and material adverse impact on the market price of our common stock.

The designation of our common stock as a "penny stock" would limit the liquidity of our common stock.

Our common stock may be deemed a "penny stock" (as that term is defined under Rule 3a51-1 of the Exchange Act) in any market that may develop in the future. Generally, a "penny stock" is a common stock that is not listed on a securities exchange and trades for less than $5.00 per share. Prices often are not available to buyers and sellers and the market may be very limited. Penny stocks in start-up companies are among the riskiest equity investments. Broker-dealers who sell penny stocks must provide purchasers of these stocks with a standardized risk-disclosure document prepared by the SEC. The document provides information about penny stocks and the nature and level of risks involved in investing in the penny stock market. A broker must also provide purchasers with bid and offer quotations and information regarding broker and salesperson compensation and make a written determination that the penny stock is a suitable investment for the purchaser and obtain the purchaser's written agreement to the purchase. Many brokers choose not to participate in penny stock transactions. Because of the penny stock rules, there may be less trading activity in penny stocks in any market that develops for our common stock in the future and stockholders are likely to have difficulty selling their shares.

FINRA sales practice requirements may limit a stockholder's ability to buy and sell our stock.

The Financial Industry Regulatory Authority, or FINRA, has adopted rules requiring that, in recommending an investment to a customer, a broker-dealer must have reasonable grounds for believing that the investment is suitable for that customer. Prior to recommending speculative or low-priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer's financial status, tax status, investment objectives and other information. Under interpretations of these rules, FINRA has indicated its belief that there is a high probability that speculative or low-priced securities will not be suitable for at least some customers. If these FINRA requirements are applicable to us or our securities, they may make it more difficult for broker-dealers to recommend that at least some of their customers buy our common stock, which may limit the ability of our stockholders to buy and sell our common stock and could have an adverse effect on the market for and price of our common stock.

Because we became a reporting company under the Exchange Act by means other than a traditional underwritten initial public offering, we may not be able to attract the attention of research analysts at major brokerage firms.

Because we did not become a reporting company by conducting an underwritten initial public offering of our common stock, and because we are not be listed on a national securities exchange, security analysts of brokerage firms may not provide coverage of our company. In addition, investment banks may be less likely to agree to underwrite secondary offerings on our behalf than they might if we became a public reporting company by means of an underwritten initial public offering, because they may be less familiar with our company as a result of more limited coverage by analysts and the media, and because we became public at an early stage in our development. The failure to receive research coverage or support in the market for our shares will have an adverse effect on our ability to develop a liquid market for our common stock.

The resale of shares covered by the registration statement of which this prospectus forms a part could adversely affect the market price of our common stock in the public market, should one develop, which result would in turn negatively affect our ability to raise additional equity capital.

The sale, or availability for sale, of our common stock in the public market may adversely affect the prevailing market price of our common stock and may impair our ability to raise additional capital by selling equity or equity-linked securities. We filed the registration statement of which this prospectus forms a part with the SEC to register the resale of substantially all of the shares of our common stock issued in connection with the Merger. Once effective, the registration statement will permit the resale of these shares at any time, except for shares held by affiliates, subject to applicable lock-up restrictions described in the "Certain Relationships and Related Person Transactions—Lock-Up Provisions in Registration Rights Agreement" section. The resale of a substantial number of shares of our common stock in the public market could adversely affect the market price for our common stock and make it more difficult for you to sell shares of our common stock at times and prices that you feel are appropriate. Furthermore, we expect that, because there will be a large number of shares registered pursuant to the registration statement of which this prospectus forms a part, selling stockholders will continue to offer shares covered by the registration statement for a significant period of time, the precise duration of which cannot be predicted. Accordingly, the adverse market and price pressures resulting from an offering pursuant to the registration statement may continue for an extended period of time and continued negative pressure on the market price of our common stock could have a material adverse effect on our ability to raise additional equity capital.

We will incur increased costs associated with, and our management will need to devote substantial time and effort to, compliance with public company reporting and other requirements.

As a public company, and particularly if and after we cease to be an "emerging growth company" or a "smaller reporting company," we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the rules and regulations of the SEC and any national securities exchange to which we may be subject in the future impose numerous requirements on public companies, including requirements relating to our corporate governance practices, with which we will need to comply. Further, we are required to, among other things, file annual, quarterly and current reports with respect to our business and operating results. Our management and other personnel will need to devote substantial time to gaining expertise regarding operations as a public company and compliance with applicable laws and regulations, and our efforts and initiatives to comply with those requirements could be expensive.

Prior Kura was not subject to requirements to establish, and did not establish, internal control over financial reporting and disclosure controls and procedures prior to the Merger. Our management team and board of directors will need to devote significant efforts to maintaining adequate and effective disclosure controls and procedures and internal control over financial reporting in order to comply with applicable regulations, which may include hiring additional legal, financial reporting and other finance and accounting staff and engaging consultants to assist in designing and implementing such procedures. Additionally, any of our efforts to improve our internal controls and design, implement and maintain an adequate system of disclosure controls may not be successful and will require that we expend significant cash and other resources.

If we fail to maintain proper and effective internal controls, our ability to produce accurate and timely financial statements could be impaired, which could harm our operating results, our ability to operate our business and investors' views of us.

We will be required to comply with Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act. Section 404 of the Sarbanes-Oxley Act requires public companies to conduct an annual review and evaluation of their internal controls and attestations of the effectiveness of internal controls by independent auditors. Ensuring that we have adequate internal financial and accounting controls and procedures in place so that we can produce accurate financial statements on a timely basis is a costly and time-consuming effort that will need to be evaluated frequently. Our failure to maintain the effectiveness of our internal controls in accordance with the requirements of the Sarbanes-Oxley Act could have a material adverse effect on our business. We could lose investor confidence in the accuracy and completeness of our financial reports, which could have an adverse effect on the price of our common stock. In addition, if our efforts to comply with new or changed laws, regulations, and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

We are an emerging growth company and a smaller reporting company, which will allow us to take advantage of certain reduced disclosure obligations as a public reporting company that may make our common stock less attractive to investors.

We are an "emerging growth company" under the JOBS Act and a "smaller reporting company" as defined in applicable rules under the Exchange Act. As an emerging growth company and a smaller reporting company, we are eligible to take advantage of certain extended accounting standards and exemptions from various reporting requirements that are not available to public reporting companies that do not qualify for those classifications. For instance, we are exempt from any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and financial statements, commonly known as an "auditor discussion and analysis;" we are not required to hold a nonbinding advisory stockholder vote on executive compensation or any golden parachute payments not previously approved by stockholders; we are not required to comply with the requirement of auditor attestation of management's assessment of internal control over financial reporting, which is required for some other public reporting companies by Section 404 of the Sarbanes-Oxley Act of 2002; we are eligible for reduced disclosure obligations regarding executive compensation in our periodic and annual reports; and we are eligible for reduced financial statement disclosure in any registration statements under the Securities Act or reports under the Exchange Act that we may file. For as long as we continue to be an emerging growth company and/or a smaller reporting company, which we anticipate will be for the foreseeable future, we expect that we will take advantage of the reduced disclosure obligations available to us as a result of those respective classifications. As a result, our publicly available disclosure may not be as robust or comprehensive as that of other public reporting companies that do not qualify for those classifications.

Further, as an emerging growth company, we can elect to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to take advantage of this extended transition period and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. As a result, changes in rules of U.S. generally accepted accounting principles or their interpretation, the adoption of new guidance or the application of existing guidance to changes in our business could significantly affect our financial position and results of operations.

We are not subject to compliance with rules requiring the adoption of certain corporate governance measures and as a result our stockholders have limited protections against interested director transactions, conflicts of interest and similar matters.

The Sarbanes-Oxley Act of 2002, as well as rule changes enacted by the SEC, the New York and American Stock Exchanges and the NASDAQ Stock Market, as a result of Sarbanes-Oxley, require the implementation of various measures relating to corporate governance. These measures are designed to enhance the integrity of

corporate management and the securities markets and apply to securities that are listed on those exchanges or the NASDAQ Stock Market. Because we are not presently required to comply with many of the corporate governance provisions we have not yet adopted these measures.

We do not currently have independent audit or compensation committees. As a result, our directors have the ability, among other things, to determine their own level of compensation. Until we comply with such corporate governance measures, regardless of whether such compliance is required, the absence of such standards of corporate governance may leave our stockholders without protections against interested director transactions, conflicts of interest and similar matters.

We have broad discretion in the use of our cash and may not use our cash effectively, which could adversely affect our results of operations.

Our management has broad discretion in the application of our cash resources. Because of the number and variability of factors that will determine our use of our cash resources, our management might not apply our cash in ways that ultimately increase the value of our common stock. The failure by our management to apply our cash effectively could harm our business. Pending their use, we may invest our cash in short-term, investment-grade, interest-bearing securities. These investments may not yield a favorable return to our stockholders. If we do not invest or apply our cash in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

Management and our board of directors beneficially own a substantial amount of our outstanding equity securities and will be able to exert substantial control over us.

Our executive officers and directors beneficially own a substantial percentage of our outstanding equity securities. Accordingly, if they act as a group, our executive officers and directors will be able to significantly influence all business decisions, including with respect to such matters as amendments to our charter, other fundamental corporate transactions such as mergers, asset sales and the sale of us, and otherwise will be able to significantly influence our business and affairs.

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

We expect that significant additional capital will be needed in the future to continue our planned operations. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities in more than one transaction, investors in a prior transaction may be materially diluted by subsequent sales. Additionally, any such sales may result in material dilution to our existing stockholders, and new investors could gain rights, preferences and privileges senior to those of holders of our common stock. Further, any future sales of our common stock by us or resales of our common stock by our existing stockholders could cause the market price of our common stock to decline.

Pursuant to our 2014 plan, we are authorized to grant equity awards consisting of shares of our common stock to our employees, directors and consultants. Any future grants of options, warrants or other securities exercisable or convertible into our common stock, or the exercise or conversion of such shares, and any sales of such shares in the market, could have an adverse effect on the market price of our common stock.

We do not intend to pay cash dividends on our capital stock in the foreseeable future.

We have never declared or paid any dividends on our common stock and do not anticipate paying any dividends in the foreseeable future. Any future payment of cash dividends in the future would depend on our financial condition, contractual restrictions, solvency tests imposed by applicable corporate laws, results of operations, anticipated cash requirements and other factors and will be at the discretion of our board of directors. Our stockholders should not expect that we will ever pay cash or other dividends on our outstanding capital stock.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference in this prospectus include forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act that relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Words such as, but not limited to, "believe," "expect," "anticipate," "estimate," "intend," "may," "plan," "potential," "predict," "project," "targets," "likely," "will," "would," "could," "should," "continue," and similar expressions or phrases, or the negative of those expressions or phrases, are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on our projections of the future that are subject to known and unknown risks and uncertainties and other factors that may cause our actual results, level of activity, performance or achievements expressed or implied by these forward-looking statements, to differ. The sections in this prospectus entitled "Description of Our Business," "Risk Factors," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" as well as other sections in this prospectus, discuss some of the factors that could contribute to these differences. These forward-looking statements include, among other things, statements about:

- the initiation, cost, timing, progress and results of our research and development activities, clinical trials and preclinical studies;
- the early stage of products under development;
- the timing of and our ability to obtain and maintain regulatory approval of our existing product candidates, any product candidates that we may develop, and any related restrictions, limitations, and/or warnings in the label of any approved product candidates;
- our plans to research, develop and commercialize our future product candidates;
- our ability to attract collaborators with development, regulatory and commercialization expertise;
- our ability to obtain and maintain intellectual property protection for our product candidates;
- our ability to successfully commercialize our product candidates;
- the size and growth of the markets for our product candidates and our ability to serve those markets;
- the rate and degree of market acceptance of any future products;
- the success of competing drugs that are or become available;
- government regulation;
- regulatory developments in the United States and other countries;
- the performance of our third-party suppliers and manufacturers and our ability to obtain alternative sources of raw materials;
- our ability to obtain additional financing;
- our use of the proceeds from our recently completed private placement;
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act;
- the accuracy of our estimates regarding expenses, future revenues, capital requirements and the need for additional financing; and
- our ability to attract and retain key management, scientific or clinical personnel.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events

could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important cautionary statements in this prospectus, particularly in the “Risk Factors” section, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement of which this prospectus forms a part, completely and with the understanding that our actual future results may be materially different from what we expect. The forward-looking statements contained in this prospectus are made as of the date of this prospectus, and we do not assume, and specifically disclaim, any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

DESCRIPTION OF THE MERGER

Pursuant to the Merger Agreement by and among Zeta Acquisition Corp. III, Merger Sub and Prior Kura, Merger Sub merged with and into Prior Kura, with Prior Kura remaining as the surviving entity and a wholly-owned operating subsidiary of Zeta Acquisition Corp. III. The Merger was effective on March 6, 2015, upon the filing of a Certificate of Merger with the Secretary of State of the State of Delaware. As part of the Merger, Prior Kura changed its name to Kura Operations, Inc.

Immediately following the Merger, a newly organized wholly-owned subsidiary of Zeta Acquisition Corp. III named "Kura Oncology, Inc." merged with and into Zeta Acquisition Corp. III, leaving Zeta Acquisition Corp. III as the surviving corporation. In connection with the Name Change Merger, we relinquished our corporate name "Zeta Acquisition Corp. III" and assumed in its place the name "Kura Oncology, Inc." The Name Change Merger and name change became effective on March 6, 2015, upon the filing of a Certificate of Ownership and Merger with the Secretary of State of the State of Delaware. In addition, on March 31, 2015, Kura Operations, Inc. merged with and into us and we continued as the surviving entity.

At the effective time of the Merger, or the Effective Time, the legal existence of Merger Sub ceased and each share of Prior Kura common stock that was issued and outstanding immediately prior to the Effective Time was automatically exchanged for 0.5 shares of our common stock, which we refer to as the Exchange. We issued an aggregate of 14,508,177 shares of our common stock upon the Exchange. In addition, at the Effective Time, we assumed Prior Kura's 2014 Equity Incentive Plan and concurrently approved the amendment and restatement of the Prior Kura's 2014 Equity Incentive Plan, which became effective in April 2015. As of the Effective Time, there were no outstanding options to purchase shares of Prior Kura common stock under the Prior Kura 2014 Equity Incentive Plan.

Immediately following the Effective Time, pursuant to the terms of the Redemption Agreement by and among Zeta Acquisition Corp. III and its pre-Merger stockholders, we completed the closing of a redemption of 5,000,000 shares of our common stock, or the Redemption, from our pre-Merger stockholders for consideration of $70,000, plus $30,000 in professional costs related to the transaction. The 5,000,000 shares constituted all of the issued and outstanding shares of our capital stock, on a fully-diluted basis, immediately prior to the Merger.

Upon completion of the Merger and the Redemption, the former stockholders of Prior Kura held 100% of the outstanding shares of our capital stock. Unless otherwise indicated in this prospectus, all share and per share figures reflect the exchange of each share of Prior Kura common stock then outstanding for 0.5 shares of our common stock at the Effective Time of the Merger.

As a condition to the Merger, we entered into an Indemnity Agreement with our former officers and directors, or the Indemnity Agreement, pursuant to which we agreed to indemnify such former officers and directors for actions taken by them in their official capacities relating to the consideration, approval and consummation of the Merger and certain related transactions.

The Merger is being accounted for as a capital transaction. Upon the effectiveness of the Merger, the Company's business became the operation of Prior Kura and its business. Immediately following the Effective Time, our board of directors, which immediately prior to the Effective Time consisted of John Pappajohn and Matthew P. Kinley, appointed Troy E. Wilson, Ph.D., J.D., who was President and Chief Executive Officer of Prior Kura, as our Chairman, President and Chief Executive Officer and as a director to serve on our board of directors. At the Effective Time, Mr. Pappajohn and Mr. Kinley resigned from all of their positions as officers of the Company and Mr. Pappajohn resigned from his position as a director of the Company. In addition, immediately following the Effective Time, our board of directors appointed Heidi Henson, who was the Chief Financial Officer and Secretary of Prior Kura, as our Chief Financial Officer and Secretary; Yi Liu, Ph.D., who was the Chief Scientific Officer of Prior Kura, as our Chief Scientific Officer; Antonio Gualberto, M.D., Ph.D., who was the Chief Medical Officer of Prior Kura, as our Chief Medical Officer; Annette North, who was the

Senior Vice President, General Counsel of Prior Kura, as our Senior Vice President, General Counsel; and Pingda Ren, Ph.D., who was the Senior Vice President, Chemistry and Pharmaceutical Sciences of Prior Kura, as our Senior Vice President, Chemistry and Pharmaceutical Sciences. On March 17, 2015, which was the eleventh day following the date that we filed with the SEC and transmitted to our stockholders prior to the Merger, a Schedule 14f-1 reporting a change in the majority of our directors, Robert E. Hoffman was appointed to our board of directors to serve on our board of directors with Dr. Wilson, and Mr. Kinley resigned from our board of directors as of such date.

Prior to the Merger, Prior Kura sold to accredited investors approximately $60.0 million of its shares of common stock, or 18,971,136 shares at a price of $3.16 per share, which included $7.5 million in principal and $0.1 million in accrued interest from the conversion of Prior Kura's then outstanding convertible promissory notes. We refer to this transaction as the Private Placement and the number of shares stated in the preceding sentence does not reflect the Exchange in the Merger. The price per share in the Private Placement, as adjusted for the Exchange in the Merger, would be $6.32 per share of our post-Merger common stock. Also, Prior Kura granted the investors in the Private Placement registration rights requiring Prior Kura or any successor to register those shares of Prior Kura common stock (which were exchanged for shares of our common stock, along with the rest of the outstanding shares of Prior Kura capital stock, except for dissenting shares, at the Effective Time) for public resale, as described in more detail below. The then existing stockholders of Prior Kura who agreed to become parties to the registration rights agreement also became entitled to such registration rights, subject to specified differences in the agreement between the rights of new investors and existing stockholders. The Private Placement closed immediately prior to the filing of a Certificate of Merger with the Secretary of State of the State of Delaware, on March 6, 2015.

The Merger Agreement has been filed as Exhibit 2.1 to the registration statement of which this prospectus forms a part to provide investors and security holders with information regarding its terms. It is not intended to provide any other factual information about the Company or Prior Kura. The representations, warranties and covenants contained in the Merger Agreement were made only for the purposes of the Merger Agreement and as of specified dates, were solely for the benefit of the parties to the Merger Agreement, and may be subject to limitations agreed upon by the contracting parties. The representations and warranties may have been made for the purposes of allocating contractual risk between the parties to the Merger Agreement instead of establishing these matters as facts, and may be subject to standards of materiality applicable to the contracting parties that differ from those applicable to investors. Investors are not third-party beneficiaries under the Merger Agreement and should not rely on the representations, warranties and covenants or any descriptions thereof as characterizations of the actual state of facts or condition of the Company, Prior Kura or any of their respective subsidiaries or affiliates. In addition, the assertions embodied in the representations and warranties contained in the Merger Agreement are qualified by information in confidential disclosure schedules provided by the Company and Merger Sub and Prior Kura, which are not being filed with the registration statement of which this prospectus forms a part as permitted by the SEC's rules and regulations. Accordingly, investors should not rely on the representations and warranties as characterizations of the actual state of facts, since (i) they were made only as of the date of the Merger Agreement or a prior, specified date, (ii) in some cases they are subject to qualifications with respect to materiality, knowledge and/or other matters, and (iii) they may be modified in important part by the underlying disclosure schedule. Moreover, information concerning the subject matter of the representations and warranties may change after the date of the Merger Agreement, which subsequent information may or may not be fully reflected in the Company's public disclosures.

DESCRIPTION OF OUR BUSINESS

Overview

We were originally incorporated in the State of Delaware in November 2007 under the name "Zeta Acquisition Corp. III." Prior to the Merger, Zeta Acquisition Corp. III was a "shell" company registered under the Exchange Act with no specific business plan or purpose until it began operating the business of Prior Kura through the Merger transaction on March 6, 2015. Prior Kura was incorporated in the State of Delaware in August 2014 to focus primarily on discovering and developing personalized therapeutics for the treatment of solid tumors and blood cancers. Effective upon the Merger, Merger Sub merged with and into Prior Kura, and Prior Kura continued as the operating subsidiary of Zeta Acquisition Corp. III. As part of the Merger, Prior Kura changed its name to Kura Operations, Inc. In addition, on March 31, 2015 Kura Operations, Inc. merged with and into us and we continued as the surviving entity.

We are a clinical stage biopharmaceutical company discovering and developing personalized therapeutics for the treatment of solid tumors and blood cancers. We focus on the development of small molecule product candidates that target cell signaling pathways that are important to driving the progression of certain cancers. We aim to employ molecular diagnostics to identify patients with cancers who are likely to benefit from our targeted product candidates.

Advancements in cancer genetics and new molecular diagnostic tools are helping define why some patients respond to a particular therapy while other patients receive little to no clinical benefit. This new era in cancer drug discovery and development offers the potential for innovative treatments that are safer and more effective for patients with particular cancers. We aim to improve patient outcomes and contribute to the reduction in healthcare cost by matching targeted therapeutics to the patients who will benefit the most. We are developing drugs designed to inhibit the mutated or abnormally functioning cellular pathways that drive cancer growth and intend to pair them with molecular diagnostics to identify those patients with tumors most likely to respond to treatment.

Our lead product candidate, tipifarnib, is an inhibitor of protein farnesylation, a key cell signaling process implicated in cancer initiation and development. Tipifarnib is currently in a Phase 2 clinical study for the treatment of patients with solid tumors with mutant forms of HRAS, a protein involved in the mitogen-activated protein kinase, or MAPK, signaling pathway, also known as the RAS/RAF/MEK/ERK pathway. We also plan to study tipifarnib in patients with peripheral T-cell lymphoma and are evaluating other potential indications.

Our pipeline includes two preclinical programs. The first program is focused on orally-available small molecule inhibitors of extracellular-signal-regulated kinases 1 and 2 (ERK1/2), including KO-947 and other backup compounds, which are in development as a potential treatment for patients with activating mutations in, or other dysregulation of, the MAPK signaling pathway, including mutations in KRAS, BRAF and NRAS. Kinases are a family of over 500 enzymes that play essential roles in signaling and regulation of important cellular processes, including growth and proliferation. Our second preclinical program is focused on orally available, small molecule inhibitors of the menin-MLL interaction, which are currently in lead optimization and have potential as a treatment for patients with acute leukemias involving translocations or partial tandem duplications of the mixed lineage leukemia (MLL) gene.

Strategy

Our strategy is to acquire, develop, and commercialize innovative anti-cancer agents in oncology indications with significant unmet medical need. The critical components of our strategy include the following:

Focus on Oncology.

The oncology market is characterized by a number of disorders with high rates of disease recurrence and a limited response from current therapies or treatments. New oncology product candidates that address unmet

medical needs or provide efficacy and safety profiles superior to those of standard of care have the potential for expedited regulatory review and, if approved, could be positioned to experience rapid adoption rates. We believe that the combination of molecularly-targeted cancer therapies and companion diagnostics to identify patients whose cancers are dependent on these targeted cell signaling pathways presents the potential for improved patient outcomes.

Focus on Compounds Where Improved Outcomes are Associated with Specific Biomarkers.

Our strategy is to prioritize those programs for which strong scientific and clinical hypotheses exist to link improved patient outcomes with specific biomarkers. Significant progress has been made in the identification of molecular targets and pathways that more narrowly specify the causes of cancer and explain the variability in responses to different therapies by subsets of patients with a particular cancer or tumor type. We believe that the identification of such patient subsets and the correlation of their specific characteristics to the product candidate under development should increase the clinical benefit and the probability of success in our clinical trials. We believe such patient identification should also enable us to design clinical trials that may be completed more rapidly and, if successful, to achieve clinical outcomes for the targeted group that are more beneficial to the patients as well as more attractive to physicians and healthcare payors.

Leverage Companion Diagnostics to Realize Positive Clinical Outcomes.

Our development strategy is based on our belief that we can utilize effective companion diagnostics to identify patient subsets that will derive greater benefit from our product candidates. We intend to partner development of these companion diagnostics for use in clinical trials and, if successful, for commercialization of our product candidates. We have the ability to select from a number of diagnostic technology platforms and providers when choosing a partner for our programs under development.

Advance our Product Candidates in Clinical Proof-of-Concept Studies.

We initiated our first Phase 2 clinical trial of our lead product candidate, tipifarnib, in May 2015 in patients with solid tumors characterized by HRAS mutations and we plan to initiate our second phase 2 clinical trial in the third quarter of 2015 in patients with peripheral T-cell lymphoma. We intend to maximize the likelihood of success in those trials by: (1) using genetic analysis to identify one or more target patient populations that are more likely to respond to and benefit from tipifarnib and (2) evaluating biomarkers as indications of efficacy. We are also evaluating the potential for conducting additional company sponsored or investigator sponsored clinical trials of tipifarnib in certain patient subsets in other cancer indications. We intend to advance our ERK1/2 program and our Menin-MLL program through to clinical development pending successful completion of research activities and preclinical studies.

Seek and Maintain Significant Development and Commercial Rights.

We believe it is important to maintain significant development and commercial rights to our product candidates. For many cancer indications, there are a relatively small number of oncologists practicing in each of the major pharmaceutical markets and an even smaller number of oncology key opinion leaders who significantly influence the types of drugs prescribed in cancer therapy. We believe that we can reach these oncology markets effectively with a relatively small sales and marketing organization focused on these physicians and oncology key opinion leaders. As a result, we plan to seek to retain significant development and commercial rights to our products, which will enable us to retain the vast majority of the revenues from and commercial and economic value of our product candidates.

Cancer Background

Cancer is the second leading cause of death in the United States. The American Cancer Society (ACS) estimated that, in 2014, there would be approximately 1.7 million new cases of cancer and approximately

585,000 deaths from cancer in the U.S. The World Health Organization estimated that 8.2 million people worldwide died of cancer in 2012. Despite advances in cancer diagnostics and treatment the unmet medical need remains high. According to ACS, cancer is a general name for a group of over 100 diseases.

Despite significant disease variability, cancer in general originates from defects in the cell's genetic code, or DNA, which disrupt the mechanisms that normally prevent uncontrolled cell growth, proliferation, invasion and programmed cell death. Cancer cells that arise in other tissues or organs are referred to as solid tumors. Cancerous cells that arise in the lymphatic system and bone marrow are referred to as hematological tumors. Increasingly, doctors are using diagnostic tests that identify genetic defects that may make a tumor more or less sensitive to a particular therapy in order to select better treatment options for patients with that disease. As genetic testing in cancer becomes a more routine practice, we are learning that many cancers arising in diverse sites in the body may share the same type of genetic alterations. For example, a mutation in a gene called BRAF is found in the majority of patients with metastatic melanoma, but it is also found in subsets of patients with colorectal cancer, lung cancer and other malignancies.

The most common methods of treating patients with cancer are surgery, radiation and drug therapy. A cancer patient often receives treatment with a combination of these methods. Surgery and radiation therapy are particularly effective when the disease is localized. Physicians generally use systemic drug therapies when the cancer has spread beyond the primary site or cannot otherwise be treated through surgery. The goal of drug therapy is to damage and kill cancer cells or to interfere with the molecular and cellular processes that control the development, growth and survival of cancer cells. In many cases, drug therapy entails the administration of several different drugs in combination. Over the past several decades, drug therapy has been evolving from non-specific drugs that kill both healthy and cancerous cells, such as cytotoxic therapies, to drugs that target specific molecular pathways or cellular processes involved in cancer and, more recently, to therapeutics that target specific activating alterations that are the "drivers" of cancer.

Cytotoxic Therapies. The earliest approach to pharmacological cancer treatment was to develop drugs referred to as cytotoxic drugs that kill rapidly proliferating cancer cells through non-specific mechanisms, such as deterring cellular metabolism or causing damage to cellular components required for survival and rapid growth. While these drugs have been effective in the treatment of some cancers, many unmet medical needs for the treatment of cancer remain. Also, cytotoxic drug therapies act in an indiscriminate manner, killing healthy cells as well as those that are cancerous, thereby causing significant side effects and tolerability issues for patients. Due to their mechanism of action, many cytotoxic drugs have a narrow dose range above which the toxicity causes unacceptable or even fatal levels of damage to healthy cells and below which the drugs are not effective in eradicating cancer cells.

Targeted Therapies. Advances in biology and understanding of cancer have led to the development of drugs, referred to as targeted therapeutics, which are designed to attack either a target that causes uncontrolled growth of cancer cells due to a specific genetic alteration primarily found in tumors but not in normal cells, or a target that cancer cells are more dependent on for their growth than normal cells. Targeted therapeutics are designed to preferentially kill cancer cells and spare normal cells and thus, in principle, they should exhibit enhanced efficacy and patients should experience fewer treatment-related side effects. Researchers and clinical oncologists now often incorporate genetic assessments into clinical trials and routine care with the hope of directing patients to medicines, which may have a greater chance of treating their cancers effectively. Furthermore, through the use of genetic testing, it is possible to develop drugs for defined subsets of patients, and to look for patients whose tumor types harbor genetically similar alterations. As such, doctors may begin to identify tumors and select therapies based on the type of mutations they share, rather than the part of the body from which they arise. Such a system should afford more efficient drug development, the opportunity for robust clinical responses and a better understanding of the underlying mechanisms of cancer.

Disease and Market Overview

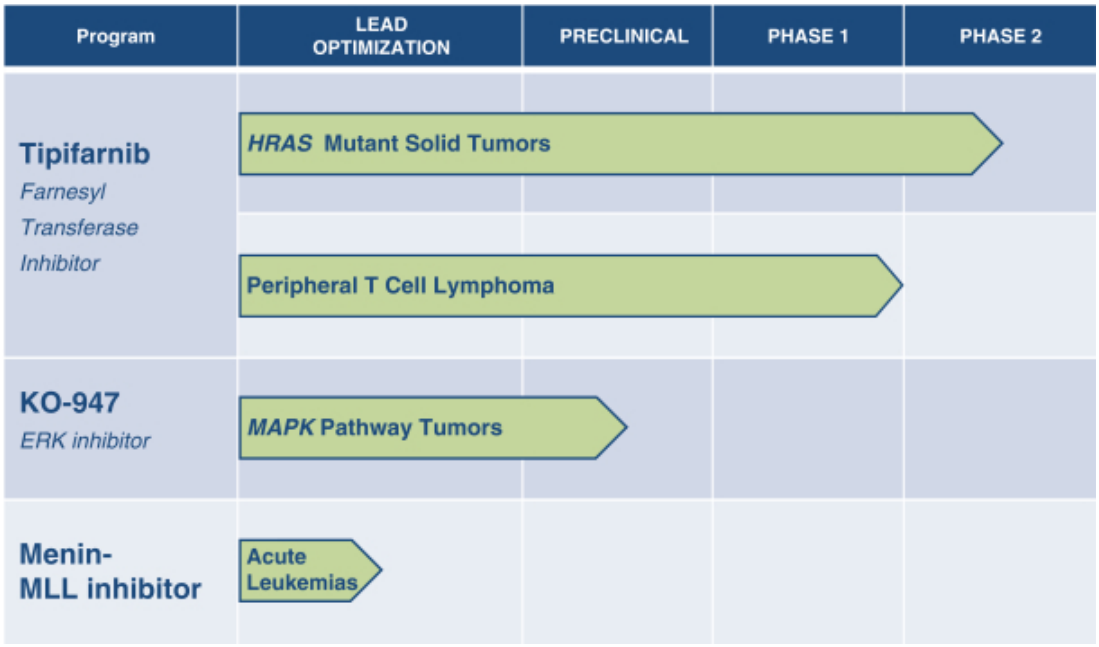
We are focused on developing targeted therapeutics for the treatment of solid tumors and blood cancers. We are evaluating our lead product candidate, tipifarnib, a farnesyl transferase inhibitor, as a potential treatment for

certain solid tumors, including thyroid cancer, head and neck cancers, urothelial carcinomas and salivary cancers, with HRAS mutations. Collectively, cancers that have an HRAS mutation are estimated to have an annual incidence of approximately 8,000 patients in the U.S. and, in general, patients with these cancers have poor prognosis and limited options for treatment. We are also evaluating tipifarnib as a potential treatment for patients with peripheral T-cell lymphoma, which has an annual incidence of approximately 7,000-10,000 patients in the U.S. Although several drugs have been approved by the U.S. Food and Drug Administration, or FDA, for treatment of relapsed or refractory PCTL, these drugs are associated with relatively low objective response rates and relatively short durations of response. Accordingly, we believe the treatment of relapsed/refractory PTCL remains a significant unmet medical need.

We are advancing a set of compounds that inhibit the activity of extracellular-signal-regulated kinases 1 and 2 (ERK1/2), including our lead candidate KO-947 as well as backup compounds, as a potential treatment for patients with tumors that have mutations in the MAPK pathway, including lung cancers, colorectal cancers, pancreatic cancers and melanoma. According to the National Cancer Institute in 2015, there are estimated to be over 49,000 cases of pancreatic cancer, 133,000 cases of colorectal cancer and over 188,000 cases of non-small cell lung cancer, or NSCLC, diagnosed each year in the United States. We believe this corresponds to approximately 45,000 cases of KRAS mutant pancreatic cancer, 53,000 cases of KRAS mutant colorectal cancer, or CRC, and 23,000 cases of KRAS mutant NSCLC each year in the United States. According to the American Cancer Society, the annual incidence of melanoma patients is estimated at 75,000 patients in the United States, of which approximately 16% have metastatic disease. Approximately 40%-60% of melanoma patients have BRAF mutations and an additional 15-20% of those patients have NRAS mutations. As ERK inhibitors target the MAPK signaling pathway, which is activated with a BRAF mutation, they may also have the potential for activity not only in patients with BRAF-mutant metastatic melanoma but also in patients with tumors that harbor mutations in the NRAS gene, who currently have no adequate treatment option and poor prognosis.

We are also advancing a set of compounds that inhibit the interaction between the proteins menin and MLL for the treatment of mixed lineage leukemias-rearranged (MLL-r) and mixed lineage leukemias-partial tandem duplications (MLL-PTD), two genetically-defined subsets of acute leukemias that affect both adults and children. The annual incidence of MLL-r and MLL-PTD patients is estimated to be 3,200 patients in the United States, and those patients currently have limited options other than chemotherapy.

Clinical Programs and Pipeline



Tipifarnib—An Oral Farnesyl Transferase Inhibitor

Overview

Tipifarnib is a new chemical entity we in-licensed in December 2014 from Janssen Pharmaceutica NV, an affiliate of Johnson & Johnson. Tipifarnib is a novel, patented small molecule inhibitor of protein farnesylation, a key cell signaling process implicated in cancer initiation and development. Tipifarnib has been studied in more than 5,000 patients, including more than 600 patients at the dose and schedule we intend to use in our Phase 2 trials. At that dose and schedule, tipifarnib exhibited a manageable side effect profile and was generally well tolerated.

Although tipifarnib has demonstrated compelling and durable anti-cancer activity in certain patients and a well-established safety profile, its activity has not been sufficient in any patient subset to support marketing approval by the FDA. A new drug application, or NDA, was previously filed with the FDA in January 2005 by a member of the Johnson & Johnson family of companies, for accelerated approval of tipifarnib for elderly patients with newly diagnosed poor risk acute myeloid leukemia, or AML, who were not candidates for standard chemotherapy. At the FDA advisory committee meeting, the panel voted against accelerated and conventional approval and the FDA subsequently issued a non-approvable letter. However, clinical and preclinical data suggest that, in the right patient population, tipifarnib has the potential to provide significant benefit to cancer patients with limited treatment options. Leveraging advances in next-generation sequencing, or NGS, as well as emerging information about cancer genetics, we will seek to identify patients most likely to benefit from tipifarnib. We initiated a Phase 2 trial in patients who have tumors characterized by HRAS mutations in May 2015 and plan to initiate a second Phase 2 trial in patients with peripheral T-cell lymphomas in the third quarter of 2015. The preclinical studies and Phase 1–3 clinical trials in support of our Investigational Drug Application, or IND, for tipifarnib were conducted by affiliates of Johnson & Johnson and the National Cancer Institute. Efficacy and safety observations included in the IND are from 17 phase 1, 2 and 3 single-agent clinical trials conducted prior to December 31, 2007. Regulatory sponsorship of the Janssen Pharmaceutica NV IND for tipifarnib has been transferred to us.

HRAS Mutant Tumors—Market Opportunity

RAS is a family of membrane-associated proteins that are involved in regulating cell division in response to growth factor stimulation. HRAS is a member of the RAS family, which includes two other proto-oncogenes: KRAS and NRAS. Collectively, the three RAS genes constitute one of the most frequently mutated families of oncogenes in human cancers. Although HRAS mutations are less common overall relative to KRAS and NRAS mutations, they have a relatively high prevalence in cancers of the upper aerodigestive tract, skin, thyroid and urinary bladder.

We believe the sum of these patient subsets, defined by the presence of an HRAS mutation, represents a significant potential patient population.

Farnesyl transferase inhibitors (FTIs) such as tipifarnib prevent protein farnesylation, a key cell signaling process implicated in cancer initiation and development. Tipifarnib has been shown to inhibit HRAS function. Specifically, by blocking HRAS farnesylation and subsequent membrane localization, tipifarnib inhibits oncogenic, HRAS-driven cellular transformation *in vitro* and *in vivo*. Earlier studies of FTIs were based on the hypothesis that FTIs would be generally active in RAS driven tumors. However, FTIs showed no significant antitumor activity in patients with advanced solid tumors such as lung, pancreatic and colon cancers, which mainly harbor KRAS mutations, and although the FTIs have demonstrated responses in certain patients with acute myeloid leukemia, the activity of the compound has not been shown to correlate with NRAS mutations. We believe the refractory nature of RAS-driven tumors to treatment with FTIs has been attributed to mechanisms of resistance that are available to tumors with KRAS and NRAS mutations but not to those tumors with HRAS mutations.

HRAS as a Human Oncogene

The HRAS protein is a GTPase that is involved in regulating cell division in response to growth factor stimulation. Growth factors act by binding cell surface receptors that span the cell's plasma membrane. Once activated, receptors stimulate signal transduction events in the cytoplasm, a process by which proteins and second messengers relay signals from outside the cell to the cell nucleus and instruct the cell to grow or divide. HRAS is an early player in many signal transduction pathways. HRAS acts as a molecular on/off switch – once it is turned on it recruits and activates proteins necessary for the propagation of the receptor's signal. In certain tumors, mutations in HRAS or its upstream effectors cause it to be permanently on, resulting in persistent activation of downstream growth and proliferation signals that drive tumor cell growth. FTIs work to prevent the aberrant growth and proliferation of cells that are dependent on these signaling pathways by switching HRAS off.

Clinical Significance of HRAS

The role of HRAS in patients with Costello syndrome, a rare genetic disorder, illustrates its potential as a human oncogene. At least five inherited mutations in the HRAS gene have been identified in people with Costello syndrome. Each of these mutations changes an amino acid in a critical region of the HRAS protein. The mutations associated with Costello syndrome lead to the production of an HRAS protein that is permanently active. Instead of triggering cell growth in response to particular signals from outside the cell, the overactive protein directs cells to grow and divide constantly. This uncontrolled cell division can result in the formation of noncancerous and cancerous tumors beginning in early childhood.

Transitional cell carcinoma of the bladder frequently occurs in adolescents with Costello syndrome, a presentation that is rare in the general population. Sporadic bladder tumors occurring in young patients without Costello syndrome also have a high frequency of HRAS mutation, but otherwise, lack extensive genetic alterations. Furthermore, HRAS mutations are present at all disease stages of bladder cancer and are detected in low-grade non-muscle invasive transitional tumors. These pieces of clinical evidence point to HRAS as a key protein involved in tumorigenesis in both Costello syndrome and, by extension, in the broader population.

Clinical Development in HRAS Mutant Tumors

We initiated a Phase 2 clinical trial in May 2015 to test the hypothesis that tipifarnib can be used as a treatment for advanced tumors with a known HRAS mutation. We designed this trial based on preclinical data which demonstrated that tipifarnib inhibits HRAS mutant cell proliferation and HRAS tumor growth in mouse models. Sponsorship of the IND for tipifarnib previously filed by Janssen has been transferred to us. The trial is expected to enroll 2 cohorts of 18 patients each. Cohort 1 will enroll subjects with malignant thyroid tumors with HRAS mutations, independently of thyroid histology. Any subject with a non-hematological HRAS mutant tumor who meets eligibility criteria may be enrolled in Cohort 2. The study has null (H0) and of-interest (H1) hypotheses of 10% and 30% response rate. This trial has a two-stage study design to minimize the number of study subjects treated if tipifarnib were not sufficiently efficacious. If one or no objective response is observed in a cohort after the first 11 evaluable patients, the cohort will be closed to further enrollment. If more than one response is observed in the cohort, 7 additional subjects will be enrolled (stage 2). Treatment will be considered of further interest if at least 4 responses are observed in a cohort (out of 18 subjects). Tumor response assessments will be conducted according to the Response Evaluation Criteria in Solid Tumors version 1.1 criteria (confirmation of response is required), but in order to expedite the response assessment of the initial 11 evaluable patients, tipifarnib will be considered not sufficiently efficacious if no confirmed objective tumor responses are observed in the study cohort prior to 6 months from the time of enrollment of the last of the 11 evaluable subjects.

Companion Diagnostics

Patients will be enrolled in our Phase 2 HRAS mutant tumor clinical trial based on the clinical sites' information on the patients' tumor HRAS mutation status. Most commonly this information will have been obtained by the clinical site from the NGS panels used by the site to characterize patients' tumors. If the results of our Phase 2 clinical trial are positive, we plan to partner development and validation of a companion diagnostic test to aid in the selection of patients with HRAS mutant tumors in subsequent clinical trials of tipifarnib in this patient population and to prepare and submit an investigational device exemption, or IDE, for use of the assay in the clinical trial. We expect that the companion diagnostic test will either be a qualitative PCR-based assay or a NGS-based assay. A qualitative PCR based assay would be technically very similar to the PCR-based assays already developed and approved by the FDA for KRAS. We expect that regulatory approval of tipifarnib as a treatment for patients with HRAS mutant tumors will require FDA approval of an HRAS assay in the form of a companion diagnostic test that has been validated for accuracy, precision and reproducibility.

Peripheral T-cell Lymphoma Opportunity

We intend to initiate a Phase 2 human clinical trial to evaluate tipifarnib as a treatment for patients with peripheral T-cell lymphoma (PTCL) in the third quarter of 2015.

Lymphoma is the most common blood cancer. The two main forms of lymphoma are Hodgkin lymphoma (HL) and non-Hodgkin lymphoma (NHL). Lymphoma occurs when cells of the immune system called lymphocytes grow and multiply uncontrollably. Cancerous lymphocytes can travel to many parts of the body, including the lymph nodes, spleen, bone marrow, blood, or other organs, and form tumors. The body has two main types of lymphocytes that can develop into lymphomas: B-lymphocytes (B-cells) and T-lymphocytes (T-cells).

Peripheral T-cell lymphoma (PTCL) consists of a group of rare and usually aggressive (fast-growing) NHLs that develop from mature T-cells. Most T-cell lymphomas are PTCLs, which collectively account for about 10 percent to 15 percent of all NHL cases, corresponding to an annual incidence of 7,000-10,000 patients per year in the United States. By some estimates, the incidence of PTCL is growing significantly, and the increasing incidence may be driven by an aging population.

PTCLs are sub-classified into various subtypes, each of which are typically considered to be separate diseases based on their distinct clinical differences. Most of these subtypes are rare; the three most common subtypes of PTCL, peripheral T-cell lymphoma not otherwise specified (PTCL-NOS), anaplastic large-cell lymphoma (ALCL), and angioimmunoblastic T-cell lymphoma (AITL), that collectively account for approximately 70 percent of all PTCLs in the United States.

Treatment Options for PTCL

For most PTCL subtypes, the frontline treatment regimen is typically combination chemotherapy, such as CHOP (cyclophosphamide, doxorubicin, vincristine, prednisone), EPOCH (etoposide, vincristine, doxorubicin, cyclophosphamide, prednisone), or other multi-drug regimens.

Patients who relapse or are refractory to frontline treatments are typically treated with gemcitabine in combination with other chemotherapies, including vinorelbine (Navelbine®) and doxorubicin (Doxil®) in a regimen called GND, or other chemotherapy regimens such as DHAP (dexamethasone, cytarabine, cisplatin) or ESHAP (etoposide, methylprednisolone, cytarabine, and cisplatin).

Because most patients with PTCL will relapse, some oncologists recommend giving high-dose chemotherapy followed by an autologous stem cell transplant to some patients who had a good response to their initial chemotherapy. Recent, non-cytotoxic therapies that have been approved for relapsed or refractory PCTL, such as pralatrexate, romidepsin and belinostat, are associated with relatively low objective response rates (25-27% ORR) and relatively short durations of response (8.2-9.4 months). Accordingly, we believe the treatment of relapsed/refractory PTCL remains a significant unmet medical need.

Previous Phase II Experience with Tipifarnib in the Treatment of PTCL

A prior Phase 2 trial of tipifarnib was sponsored by the National Cancer Institute and conducted at the Mayo Clinic and University of lowa from 2004 to 2009 in adult patients with relapsed or refractory lymphoma. Ninety-three patients (42 aggressive, 15 indolent, and 36 HL/T) were enrolled in the study, and patients received tipifarnib 300 mg twice daily on days 1-21 of each 28-day cycle. The median age of patients was 62 years (range, 18-91 years). A total of 71% of patients had stage IV disease. The median number of prior regimens was five (range, 1-17). The majority of patients were diagnosed with diffuse large B-cell lymphoma (DLBCL) (40%; 37 of 93) or Hodgkin lymphoma (HL) (20%; 19 of 93). See Table A below.

The overall response rate (ORR) for all patients was 20.4% (19 of 93), with 7% (6 of 93) complete responses (CR) and 14% (13 of 93) partial responses (PR). In the groups of aggressive, indolent, and HL/T-cell types of lymphoma, the ORRs were 17%, 7%, and 31%, respectively.

In the 19 responders, the median response duration was 7.5 months with a mean of 15.8 months. The median response duration was 11.3 months, 2 months, and 7.5 months for the groups of aggressive, indolent, and HL/T-cell lymphomas, respectively.

The highest ORR (31%) was demonstrated in the HL/T cell lymphoma group. Within that group, the ORR was 21% (4 of 19) in patients with HL and 50% (6 of 12) in T-cell Non Hodgkin Lymphoma (NHL).

The median time to progression (TTP) was 3.6 months for all patients and 3.2 months for the HL/T-cell lymphoma groups, respectively. Five patients in the HL/T-cell lymphoma group received treatment for more than 30 months with several patients receiving treatment for 60+ months.

The median overall survival (OS) was 14.8 months for all patients and 6.4 months, 20.6 months, and 19.7 months for the aggressive, indolent, and HL/T-cell lymphoma groups, respectively.

Table A: Phase 2 Clinical Trial of tipifarnib in Adult Patients with Relapsed or Refractory Lymphoma.

Disease Type	n(%)	CR, n (%)	PR, n (%)	ORR, (%) (95% CI)	Median DR (95% CI)	Median TTP (95% CI)	Median OS (95% CI)
All patients	93	6 (7)	13 (14)	20 (13-30)	7.5 (4.9-18.5)	3.6 (2.1-4.5)	14.8 (7.6-17.8)
Aggressive B-cell lymphoma group	42	0	7(17)	17 (7-31)	11.3 (4.9-17.1)	2.8 (1.7-4.2)	6.4 (4.1-10.7)
DLBCL	37 (88)	0	7(19)	19	—	—	—
Mantle cell lymphoma (MCL)	4 (10)	0	0	0	—	—	—
Folicular lymphoma (FL) III	1 (2)	0	0	0	—	—	—
Indolent B-cell lymphoma group	15	0	1 (7)	7 (0.2-32)	2 (NR)	5.2 (4-9.2)	20.6 (NR)
Chronic lymphocytic Leukemia/small lymphocytic lymphoma	5 (33)	0	0	0	—	—	—
Extranodal marginal zone	1 (7)	0	0	0	—	—	—
FL grade I	3 (20)	0	0	0	—	—	—
FL grade II	6 (40)	0	1	17	—	—	—
HL/T group	36	6 (17)	5 (14)	31 (16-48)	7.5 (3.2-29.8)	3.2 (1.9-5.8)	19.7 (9-60)
HL	19 (53)	2 (11)	2 (11)	21	—	—	—
Mycosis fungoides	4 (11)	0	2 (50)	50	—	—	—
Peripheral T-cell, unspecified	8 (22)	3 (38)	1 (13)	50	—	—	—
Anaplastic large cell, cutaneous	3 (8)	1 (33)	0	33	—	—	—
Anaplastic large cell, systemic	2 (6)	0	0	0	—	—	—

— indicates not applicable; and NR, not reported

Tipifarnib was generally well tolerated on this dose and schedule. Three patients with aggressive lymphoma died on study of progressive disease, but there were no deaths related to tipifarnib treatment. The grade 3 or 4 toxicities were primarily reversible myelosuppression, with 11% anemia, 37% neutropenia, and 32% thrombocytopenia.

Of particular relevance to our planned Phase 2 clinical trial in PTCL are the results observed in the patients with T-cell non-Hodgkin lymphoma. Although the trial enrolled only small numbers of patients, a 41% response rate (7 responses out of 17 patients) was observed in patients with T-cell non-Hodgkin lymphoma, including 4 objective responses out of 8 patients with PTCL (3 CR and 1 PR). We believe the results observed from this Phase 2 trial suggests that tipifarnib can be administered for prolonged periods and may produce durable responses as a single agent in relapsed lymphoma in a group of patients who were heavily pretreated with a median of 5 prior therapies.

The five year survival for patients with PTCL is low—roughly 35% by most published records—and few treatment options are able to provide a durable treatment effect. Treatments in the relapsed or refractory setting are not very effective. Therefore, National Comprehensive Cancer Network guidelines currently recommend that patients seek participation in a clinical trial for the initial treatment.

Clinical Development in Peripheral T-cell Lymphoma

Based on the promising results observed in the Phase 2 lymphoma study, we have designed a clinical trial to test the hypothesis that tipifarnib can be used as a treatment for patients with relapsed or refractory PTCL. We expect to initiate this Phase 2 trial in the third quarter of 2015 and it will be conducted under the IND that was transferred to us from Janssen. The current study protocol has a two-stage design for a total number of 18 eligible patients to test the primary study objectives. If one or no objective response is observed after the first 11 evaluable patients (stage 1), the study will be closed to further enrollment. If more than one response is observed, 7 additional patients will be enrolled (stage 2). Treatment will be considered of further interest if at least 4 responses are observed (out of 18 patients). Tumor response assessments will be conducted according to the International Workshop Criteria for the assessment of responses in lymphoma. The study also includes a potential extension to up to a total study enrollment of 30 patients if 5 or more objective responses are observed at the end of stage 1.

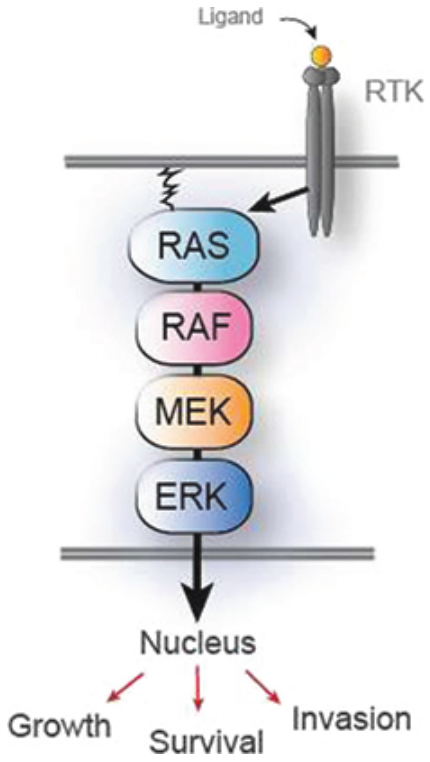
ERK Inhibitor Program

Overview

We are advancing a set of novel, orally bioavailable small molecule inhibitors of extracellular-signal-regulated kinases 1 and 2 (ERK1/2), including our lead candidate KO-947 as well as backup compounds, as a potential treatment for patients with tumors that have mutations in the MAPK pathway, including lung cancers, colorectal cancers, pancreatic cancers and melanoma. The compounds, including KO-947 and backup compounds, represent new chemical entities we acquired pursuant to an agreement effective December 23, 2014 from Araxes Pharma LLC.

The high frequency of activating mutations in components of the MAPK pathway found in cancer provides strong rationale for targeting the MAPK pathway and, specifically, ERK. The MAPK pathway is responsible for receiving growth-promoting signals from outside the cell and translating these signals within the cell into programs that affect cell growth and proliferation. When external growth factors activate cell surface receptor tyrosine kinases (RTKs), the MAPK pathway acts inside the cell to relay these growth signals through a series of signaling molecules, including the RAS, RAF, MEK, and ERK family of kinases. ERK kinase is the final signaling kinase of the MAPK pathway. See Figure 1.

Figure 1: MAPK pathway



Many cancers harbor genetic mutations in components of the MAPK pathway, especially in protein kinases, that lock transformed cells in a pro-growth state, even in the absence of external growth signals. Studies have shown that such aberrations in the MAPK pathway, including mutations in KRAS, BRAF, and other components of the pathway, are frequent contributors to the development of cancer in humans. Targeted cancer drugs, such as inhibitors of the proteins BRAF and MEK, that have been designed to turn off MAPK signaling by inhibiting specific protein kinases are effective, particularly in melanomas where the MAPK circuit is aberrantly active. We believe that a therapeutic product candidate that can block signaling of the MAPK pathway through inhibition of ERK should reduce or prevent cancer growth and may have a beneficial effect for patients.

As part of our ERK inhibitor program, we are advancing KO-947, which is an orally-available inhibitor of ERK that has nanomolar cellular potency in tumor cells with mutations in BRAF, NRAS or KRAS and induces tumor regressions at tolerable doses in xenograft mouse models. Because KO-947 targets ERK, a protein kinase essential to signaling through the MAPK pathway, it has the potential to selectively kill tumor cells bearing activating mutations in this critical pathway. KO-947 is currently in IND enabling studies, and we anticipate filing an IND in the first half of 2016.

Opportunity for Kura Oncology

We have focused on the discovery and development of ERK inhibitors and selected KO-947 as a potential product candidate because we believe that ERK inhibitors have two important potential advantages as therapeutics:

- Potential to effectively treat patients with mutations in the KRAS gene—a large and growing group of patients with lung, colorectal, pancreatic and other cancers who today have no effective therapy, and who have been identified with greater frequency due to recently approved diagnostic guidelines, and
- Potential to effectively treat patients with metastatic melanoma who receive "first-generation" BRAF or MEK inhibitors, but who develop resistance due to reactivation of ERK pathway signaling. KO-947 could prevent resistance through this mechanism and may thus cause responses of greater duration than the ones seen with first generation inhibitors and extend progression-free survival.

We acquired our ERK inhibitor program from Araxes Pharma based in La Jolla, California. Scientists at Araxes Pharma designed our ERK inhibitors using structure-guided drug discovery approaches to model chemical structures that would inhibit the ERK protein kinase but spare inhibition of closely related kinases. These molecules were then synthesized and tested in assays to verify their ability to inhibit ERK as well as to inhibit MAPK pathway signaling.

Market Overview: Solid Tumors with KRAS Mutations Represent a Significant Unmet Medical Need

Activating mutations in the KRAS gene are commonly found in a wide variety of tumor types. Among cancer indications with large patient populations, KRAS mutations are found in approximately 93 percent of pancreatic cancers, approximately 40 percent of colorectal cancers and approximately 12 percent of non-small cell lung cancers (NSCLC). According to the American Cancer Society in 2015, there are estimated to be over 49,000 cases of pancreatic cancer, 133,000 cases of colorectal cancer and over 188,000 cases of NSCLC diagnosed each year in the United States. We believe this corresponds to approximately 45,000 cases of KRAS mutant pancreatic cancer, 53,000 cases of KRAS mutant CRC, and 23,000 cases of KRAS mutant NSCLC each year in the United States. These cancers typically present relatively late in their clinical course, when locally directed therapy (surgery and radiation) is not curative. The treatment of locally advanced and metastatic cancers represents a significant unmet medical need.

Therapeutic Rationale for KRAS Mutant Tumors

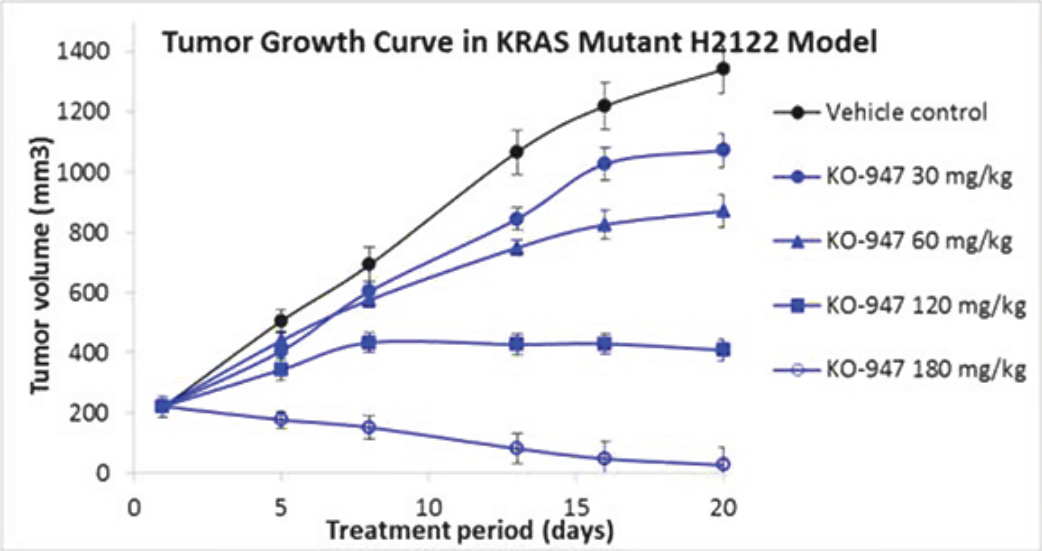
In its normal, non-mutant form, the KRAS protein plays a key role in the promotion and regulation of cell growth and division. The KRAS protein acts in a keystone position in the MAPK pathway. This pathway is responsible for receiving growth-promoting signals from outside the cell and communicating those signals within the cell so that the cell can respond appropriately to the cell growth signals.

Studies have shown that disruptions to the MAPK pathway, either by mutations in KRAS or other components of the pathway, are frequent contributors to the development of cancer in humans. Certain mutations in KRAS promote cancer by putting the KRAS protein into a constitutively active state, which promotes the uncontrolled cell growth and division that are the hallmarks of cancer. We believe that a therapeutic product candidate that can inhibit signaling through the MAPK pathway should reduce or prevent cancer growth and may have a beneficial effect for patients.

Therapeutics have been successfully developed against other components of the MAPK pathway, including the BRAF inhibitors vemurafenib (ZELBORAF®) and dabrafenib (TAFINLAR®) and the MEK inhibitor trametinib (MEKINIST®), each of which has received approval from the FDA for treatment of BRAFV600E mutant melanoma. However, patients with melanoma frequently develop resistance to these drugs, and the drugs do not have potent activity in patients with KRAS mutations. Accordingly, oncologists and patients are still in need of a therapeutic agent that can inhibit signaling through the MAPK signaling pathway and provide benefit to patients.

Preclinical Data for KO-947 for KRAS Mutant Solid Tumors

Our lead candidate in our ERK inhibitor program, KO-947, demonstrates potent inhibition of the ERK kinase and high selectivity relative to a panel of approximately 400 kinases. KO-947 has also shown promising activity in both cell culture and xenograft animal models of KRAS mutant tumors.



Xenograft tumors were grown subcutaneously in mice, followed by oral treatment with the ERK inhibitor or control. Treated animals showed full tumor regression, while vehicle control treated animals showed rapid tumor growth. In addition, KO-947 was tolerated at all dose levels with no apparent body weight loss in the mice.

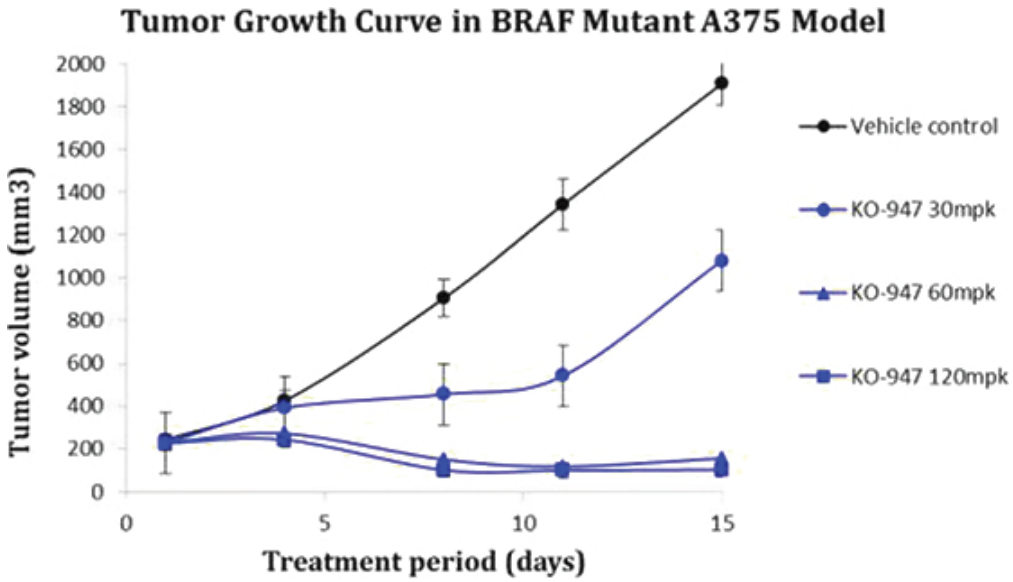
Market Overview: Melanoma Tumors with Acquired Resistance to BRAF and MEK Inhibitors Represent a Significant Unmet Medical Need

Specific inhibitors of RAF and MEK kinases have been developed to target BRAF- and RAS-mutant tumors. In particular, the FDA has approved the BRAF inhibitors vemurafenib (ZELBORAF®) and dabrafenib (TAFINLAR®) as well as the MEK inhibitor trametinib (MEKINIST®) for the treatment of BRAFV600E-mutant metastatic melanoma. Although these approvals are encouraging, durable responses in patients are limited, as median time to disease progression is approximately 6-7 months and resistance is often associated with pathway reactivation of the ERK signaling pathway.

According to the American Cancer Society in 2015, the annual incidence of diagnosed melanoma is 74,000 cases in the United States, of which approximately 16% have metastatic disease, and nearly 9,500 melanoma deaths occur in the each year in the United States. Mutations that activate the RAS/RAF/MEK/ERK pathway are common in melanoma, with BRAF mutations in 40% to 60%, and NRAS mutations in 15-20% of melanoma patients, suggesting the therapeutic potential for agents that target this pathway in metastatic melanoma. As ERK inhibitors target the RAS/RAF/MEK/ERK pathway, which is activated with BRAF mutation, they may also have the potential for activity not only in patients with BRAF-mutant melanoma, but also in patients with tumors that harbor mutations in the NRAS gene, who currently have no adequate treatment option and poor prognosis.

Preclinical Data for ERK Product Candidate for Melanoma with Acquired Resistance to BRAF and MEK Inhibitors

There is a strong rationale to develop ERK inhibitors for tumors that are resistant to other inhibitors of the MAPK pathway. Selective BRAF and MEK inhibitors have shown clinical efficacy in patients with melanoma. However, the majority of responses are transient, and resistance is often associated with reactivation of MAPK signaling pathway. In preclinical studies, ERK inhibitors have demonstrated promising activity in both cell culture and xenograft animal models of tumors resistant to BRAF and MEK inhibitors.



In particular, xenograft tumors were grown subcutaneously in mice, followed by oral treatment with ERK inhibitor or control. Treated animals showed full tumor regression at tolerated doses, while vehicle control treated animals showed rapid tumor growth.

Ongoing IND-enabling Studies

Based on these preclinical efficacy data in both KRAS and BRAF mutant tumor models, we have advanced KO-947 into IND-enabling studies. The IND-enabling program includes toxicology studies to determine if select doses, schedules and modes of administration are able to achieve required drug exposures to generate tumor regression, which could be tolerable in the clinical setting. In addition, we are also advancing additional ERK inhibitors as potential backup compounds to KO-947. We anticipate filing an IND in the first half of 2016.

Menin-MLL Program

Overview

We are developing orally bioavailable small molecule inhibitors of the menin-MLL interaction for the treatment of MLL-rearranged (MLL-r) acute leukemias, a genetically defined subtype of the two most common forms of acute leukemia, AML and acute lymphoblastic leukemia, or ALL.

Background on Mixed Lineage Leukemias

MLL-r leukemias are an aggressive subtype of two of the most common forms of acute leukemia, ALL and AML. The estimated five-year overall survival rate for adult patients with the MLL-r subtype of AML ranges

from approximately 5% to 24%, and the total annual incidence of MLL-r leukemias in all patients in the U.S. and Europe has been estimated at approximately 5,000 patients. Patients with MLL-r leukemias are routinely diagnosed using existing technologies that are commonly used in clinical settings. As a result, there is high awareness of MLL-r leukemias among oncologists. The disease predominantly occurs in two different demographics—an adult population and an infant/pediatric population. While they share a common genetic alteration, the adult disease is frequently a secondary leukemia resulting from prior chemotherapy for a different, unrelated cancer, and the childhood disease arises de novo. MLL-r leukemias are caused by a chromosomal translocation involving the MLL gene.

Mixed lineage leukemia gene-partial tandem duplication (MLL-PTD) is a subset of AML. MLL-PTD typically confers a worse prognosis with shortened overall and event free survival in childhood and adult AML.

The annual incidence of MLL-r and MLL-PTD patients is estimated to be 3,200 patients in the United States, and those patients currently have limited options other than chemotherapy. There are no approved therapies specifically indicated for either the MLL-r or MLL-PTD leukemias. Physicians treat these hematological cancers with therapies approved for other acute leukemias and malignancies. Patients with AML and ALL typically are treated with intensive multi-agent chemotherapy and high risk patients are treated with an allogeneic stem cell transplant. However, some patients, especially those who are older, are too fragile for any of these treatments and, as a result, have very few treatment options. Accordingly, we believe the treatment of MLL-r and MLL-PTD leukemias remains a significant unmet medical need.

Targeting the MLL-Menin Interaction

The mixed lineage leukemia (MLL) gene is a common target of chromosomal translocations found in patients with AML and ALL, which affects both children and adults. Fusion of MLL with one of over 50 different partner genes forms oncogenes encoding MLL fusion proteins, which play a causative role in the onset, development and progression of MLL.

The effect of MLL fusion proteins on the development and progression of leukemia is critically dependent on their direct interaction with menin, a protein encoded by the Multiple Endocrine Neoplasia 1 (MEN1) gene. Menin is a tumor suppressor protein, which directly controls cell growth in endocrine organs. Binding of menin to MLL fusion proteins upregulates expression of target genes involved in the malignant transformation of blood cells. In contrast, mutations to MLL fusion proteins that block association with menin abrogate the development of acute leukemia in mice. These findings demonstrate that menin functions as an essential oncogenic co-factor of MLL fusion proteins, and it implies that the menin-MLL interaction represents a valuable target for molecular therapy.

We have licensed from the University of Michigan a class of small molecule inhibitors of the menin-MLL fusion protein interaction that specifically bind to menin with nanomolar potency. By blocking menin—MLL fusion protein interactions, these compounds effectively reverse MLL fusion protein-mediated leukemic transformation by down regulating the expression of target genes required for MLL-fusion protein oncogenic activity. These compounds also selectively block proliferation and induce both apoptosis and differentiation of leukemia cells harboring MLL translocations.

Opportunity for Kura Oncology

Our menin-MLL development program is aimed at identifying product candidates with the potential to effectively treat patients with MLL-r leukemias —a subset of adult and pediatric patients who today have no effective therapy—as well as MLL-PTD leukemias, a subset of acute myeloid leukemias that have no effective therapy.

License and Asset Purchase Agreements

Janssen Pharmaceutica NV

We entered into a license agreement with Janssen on December 18, 2014, which grants us exclusive global rights to develop and commercialize tipifarnib in the field of oncology and includes the right to grant sublicenses. We are obligated under the license agreement to use commercially reasonable efforts to develop and commercialize tipifarnib in oncology and, with the exception of the transfer to us without cost of Janssen's existing inventory of tipifarnib material, we are responsible for all future development and commercialization costs for tipifarnib in oncology. Under the license agreement, Janssen has a first right to negotiate for an exclusive license back from us to develop and commercialize tipifarnib on terms to be negotiated in good faith. Janssen may exercise this right of first negotiation during the 60-day period following completion of a Phase 2 clinical trial of tipifarnib in HRAS mutant patients in oncology and delivery by us to Janssen of a complete data package from such clinical trial.

Under the terms of the license agreement, on January 20, 2015 we issued a convertible promissory note in the principal amount of $1,000,000 to Johnson & Johnson Innovation—JJDC, Inc., which automatically converted into shares of Prior Kura common stock in the Private Placement. When and if commercial sales of tipifarnib begin, we are obligated to pay Janssen tiered royalties of low double digit percentages of our net sales, depending on the amount of our net sales, with standard provisions for royalty offsets in the event of generic competition or compulsory licenses, on a product-by-product and country-by-country basis until the later of the expiration of the last to expire valid claim of the licensed patents covering the licensed product in the field in such country, the expiration of any regulatory exclusivity with respect to such product in such country, and ten years from our first commercial sale. We are also required to make regulatory milestone payments to Janssen of up to $25 million in the aggregate, if specified regulatory approvals are achieved for the first indication and additional payments for each subsequent indication if specified regulatory approvals are achieved. In addition, we are required to make sales milestone payments of up to $50 million in the aggregate if specified sales thresholds are surpassed. If we grant sublicenses under the license from Janssen, we are required to pay to Janssen a percentage of any upfront, lump-sum or milestone payments received from our sublicensee, subject to certain exclusions for regulatory milestone payments due under the license agreement.

The license agreement with Janssen will remain in effect until the expiration of all of our royalty and sublicense revenue obligations to Janssen, determined on a product-by-product and country-by-country basis, unless we elect to terminate the license agreement earlier. If we fail to meet our obligations under the license agreement and are unable to cure such failure within specified time periods, Janssen can terminate the license agreement, resulting in a loss of our rights to tipifarnib.

Araxes Pharma LLC

We entered into an asset purchase agreement with Araxes Pharma LLC, or Araxes, on December 23, 2014, under which we purchased all of Araxes' patent rights in the ERK program, including KO-947 and additional backup compounds, and related intellectual property. When and if commercial sales of a product candidate covered by the purchased patent rights begin, we are obligated to pay Araxes tiered royalties of low single digit percentages of our net sales, depending on the amount of our net sales with standard provisions for royalty offsets. We are also required to make development and regulatory milestone payments to Araxes of up to $9.7 million in the aggregate if specified development events and regulatory approvals are achieved. Under the terms of the asset purchase agreement, on December 23, 2014 we issued a convertible promissory note in the principal amount of $500,000 to Araxes, which automatically converted into shares of Prior Kura common stock in the Private Placement.

Competition

The development and commercialization of new products to treat cancer is intensely competitive and subject to rapid and significant technological change. While we believe that our knowledge, experience and scientific resources provide us with competitive advantages, we face substantial competition from major pharmaceutical companies, specialty pharmaceutical companies, and biotechnology companies worldwide. Many of our

competitors have significantly greater financial, technical, and human resources. Smaller and early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. As a result, our competitors may discover, develop, license or commercialize products before or more successfully than we do.

We face competition with respect to our current product candidates, and will face competition with respect to future product candidates, from segments of the pharmaceutical, biotechnology and other related markets that pursue approaches to targeting molecular alterations and signaling pathways associated with cancer. Our competitors may obtain regulatory approval of their products more rapidly than we do or may obtain patent protection or other intellectual property rights that limit our ability to develop or commercialize our product candidates. Our competitors may also develop drugs that are more effective, more convenient, less costly, or possessing better safety profiles than our products, and these competitors may be more successful than us in manufacturing and marketing their products.

In addition, we will need to develop our product candidates in collaboration with diagnostic companies, and we will face competition from other companies in establishing these collaborations. Our competitors will also compete with us in recruiting and retaining qualified scientific, management and commercial personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Furthermore, we also face competition more broadly across the market for cost-effective and reimbursable cancer treatments. The most common methods of treating patients with cancer are surgery, radiation and drug therapy, including chemotherapy, hormone therapy and targeted drug therapy or a combination of such methods. There are a variety of available drug therapies marketed for cancer. In many cases, these drugs are administered in combination to enhance efficacy. While our product candidates, if any are approved, may compete with these existing drug and other therapies, to the extent they are ultimately used in combination with or as an adjunct to these therapies, our product candidates may not be competitive with them. Some of these drugs are branded and subject to patent protection, and others are available on a generic basis. Insurers and other third-party payors may also encourage the use of generic products or specific branded products. We expect that if our product candidates are approved, they will be priced at a premium over competitive generic, including branded generic, products. As a result, obtaining market acceptance of, and gaining significant share of the market for, any of our product candidates that we successfully introduce to the market will pose challenges. In addition, many companies are developing new therapeutics, and we cannot predict what the standard of care will be as our product candidates progress through clinical development.

Tipifarnib Competition

While there are currently no approved drugs targeting farnesyltransferase, we are aware of a number of compounds that are now or have previously been in clinical development, including Merck's lonafarnib, Bristol-Myers Squibb's BMS-214662, Astellas Pharma's (formerly OSI) CP-609,754, and AstraZeneca's AZD3409. Lonarfarnib is currently being investigated in a Phase 1 trial in combination with temozolomide in patients with malignant gliomas. To our knowledge, there are no other ongoing clinical trials evaluating any of these agents for the treatment of cancer. However, the initiation of clinical development of another of these agents in an oncology setting could become competitively significant, and if tipifarnib or our other product candidates do not offer sustainable advantages over competing products, we may not be able to successfully compete against current and future competitors.

Even if we are successful in developing our product candidates, the resulting products would compete with a variety of established drugs in targeted therapeutic indication of peripheral T-cell lymphoma, including belinostat (Beleodaq®) and pralatrexate (Folotyn®), marketed by Spectrum Pharmaceuticals, romidepsin (Istodax®), marketed by Celgene, and brentuximab vedotin (Adcetris®) (for anaplastic large-cell lymphoma), marketed by Seattle Genetics. Although there are currently no drugs approved specifically for the treatment of HRAS-mutant

solid tumors, there are a number of targeted therapies approved for the treatment of thyroid cancer, including AstraZeneca's vandetanib (Caprelsa®), Bayer's sorafenib (Nexavar®), Exelixis' cabozantinib (Cometriq®) and Eisai's lenvatinib (Lenvima®).

ERK Inhibitor Competition

While there are currently no approved drugs targeting extracellular-signal regulated kinase (ERK), we are aware of a number of compounds that are in clinical development, including Roche/Genentech's GDC-0994, Celgene's CC-90003, and BioMed Valley Discoveries' BVD-523. Furthermore, it is possible that other companies are also engaged in discovery or preclinical development of compounds targeting ERK. These competitors, if successful in clinical development, may achieve clinical activity, regulatory approval and market adoption in advance of our compounds, constraining the ability of our compounds to gain significant market share. Although we believe that our ERK inhibitors, including KO-947, present several potential advantages relative to these aforementioned candidates, including potency as demonstrated in preclinical studies, these results may not translate to superior therapeutic benefit in clinical trials.

Menin-MLL Inhibitor Competition

There are no drugs approved or in clinical trials targeting the menin-MLL protein-protein interaction. Although there are no targeted therapies approved specifically for the treatment of MLL-rearranged leukemias, there are a number of products in clinical development, including Epizyme's EPZ-5676 and Novartis's midostaurin, as well as Pfizer's palbociclib (IBRANCE®), which has received accelerated approval in combination with letrozole, for the treatment of postmenopausal women with estrogen receptor-positive, human epidermal growth factor receptor 2-negative (ER+/HER2-) advanced breast cancer as initial endocrine-based therapy for their metastatic disease.

Commercialization

We have not yet established a sales, marketing or product distribution infrastructure because our lead candidates are still in discovery, preclinical or early clinical development. We anticipate that we will aim to retain commercial rights in North America for any of our product candidates for which we may in the future receive marketing approvals. We may also seek to retain commercial rights in Europe for any of our product candidates for which we may in the future receive marketing approvals. We currently anticipate that, if and when appropriate, we will seek to access the North American or European oncology markets through a focused, specialized, internal sales force.

Subject to receiving marketing approvals, we expect to commence commercialization activities by building a focused internal sales and marketing team in North America to sell our products. We may also build a focused internal sales and marketing team in Europe to sell our products. We believe that such an approach will enable us to address the community of oncologists who are the key specialists in treating the patient populations for which our current product candidates are being developed. Outside of regions where we maintain commercial rights, we may enter into distribution and other marketing arrangements with third parties for any of our product candidates that obtain marketing approval in foreign jurisdictions.

We also aim to build a marketing and sales management force to create and implement marketing strategies for any products that we may in the future market through our own sales teams and to oversee and support our sales force. We anticipate that our goals for any such marketing force include developing educational initiatives with respect to any approved products and establishing relationships with thought leaders in relevant fields of medicine.

We currently expect that any third parties with which we may collaborate in the future on the development of any commercial companion diagnostics for use with our therapeutic products will most likely hold the

commercial rights to those diagnostic products. We expect that we would coordinate closely with any future diagnostic collaborators in connection with the marketing and sale of such diagnostic products and our related therapeutic products.

Manufacturing

We do not own or operate, and currently have no plans to establish, any manufacturing facilities. We currently rely, and expect to continue to rely, on third parties for the manufacture of our product candidates for preclinical and clinical testing as well as for commercial manufacture of any products that we may commercialize. Under our license agreement with Janssen, Janssen has provided us with its existing inventory of clinical supply of tipifarnib, which we believe will support our planned Phase 2 clinical trials of tipifarnib. Janssen also provided us with its existing inventory of the crude drug substance and bulk key intermediate for manufacture of drug substance for tipifarnib. If needed, we aim to engage, by entering into a supply agreement or through another arrangement, third party manufacturers to provide us with additional tipifarnib clinical supply. For all of our product candidates, we aim to identify and qualify manufacturers to provide the active pharmaceutical ingredient and fill-and-finish services prior to submission of a NDA to the FDA.

We generally expect to rely on third parties for the manufacture of any companion diagnostics we or our collaborators may develop.

Intellectual Property

Our commercial success depends in part on our ability to obtain and maintain proprietary or intellectual property protection for our product candidates and our core technologies, including novel biomarker and diagnostic discoveries and other know-how, to operate without infringing on the proprietary rights of others and to prevent others from infringing our proprietary or intellectual property rights. We expect that we will seek to protect our proprietary and intellectual property position by, among other methods, licensing or filing our own U.S., international and foreign patent applications related to our proprietary technology, inventions and improvements that are important to the development and implementation of our business. We also rely on trade secrets, know-how and continuing technological innovation to develop and maintain our proprietary and intellectual property position, which we generally seek to protect through contractual obligations with third parties.

We currently, and expect that we will continue to, file or license patent applications directed to our key product candidates in an effort to establish intellectual property positions regarding composition-of-matter of these product candidates, as well as formulations, processes and methods of using these product candidates in the treatment of various cancers. We also intend to seek patent protection, if available, with respect to biomarkers that may be useful in selecting the right patient population for use of any of our product candidates. We own or in-license a patent portfolio consisting of over 25 patent families, including issued U.S. patents and their respective counterparts in a number of foreign jurisdictions, pending U.S. patent applications, pending applications under the Patent Cooperation Treaty and corresponding pending patent applications in a number of foreign jurisdictions. In particular, we have exclusively licensed from Janssen a portfolio of approximately 20 patent families including composition-of-matter patents that cover tipifarnib as well as method-of-use patents covering tipifarbnib for treating various cancers. These composition-of-matter and method-of-use patents are issued in major market countries including the United States, Europe, and Japan, and they are expected to expire in 2016 without patent term extension. We in-license from the University of Michigan, or co-own approximately six families of patent applications pertaining to our Menin-MLL program. Other patent applications we own include composition-of-matter and method-of-use applications covering our ERK product candidate. We currently, and expect that we will continue to, file for patents in the United States with counterparts in major market countries in Europe and other key markets in the rest of the world. We would expect that any patents that may issue from the pending U.S. patent applications directed to our ERK program and our Menin-MLL program would likely start to expire in 2030; however, any and all of these patent applications may not result in issued patents.

In addition to the patent applications that we have filed to date, we plan to continue to expand our intellectual property portfolio by filing patent applications directed to dosage forms, methods of treatment and additional inhibitor compounds of oncology molecular targets and their derivatives. Specifically, we anticipate that we will seek patent protection in the United States and internationally for novel compositions of matter covering the compounds, the chemistries and processes for manufacturing these compounds, their intermediates and/or metabolites, the use of these compounds in a variety of therapies and the use of biomarkers for patient selection for these compounds. However, these or other patent applications that we may file or license from third parties may not result in the issuance of patents, and any issued patents may cover limited claims that reduce their value and/or may be challenged, invalidated or circumvented. See "Risk Factors—Rights Related to Our Intellectual Property."

In addition to patents, we also rely upon unpatented trade secrets and know-how and continuing technological innovation to develop and maintain our competitive position. We seek to protect our proprietary information, in part, using confidentiality agreements with our collaborators, scientific advisors, employees and consultants, and invention assignment agreements with our employees and selected consultants, scientific advisors and collaborators. The confidentiality agreements are designed to protect our proprietary information and, in the case of agreements or clauses requiring invention assignment, to grant us ownership of technologies that are developed through a relationship with a third-party.

Orange Book Listing

In seeking approval for a drug through an NDA, applicants are required to list with the FDA certain patents whose claims cover the applicant's product. Upon approval, each of the patents listed in the application for the drug is then published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Any applicant who files an ANDA seeking approval of a generic equivalent version of a drug listed in the Orange Book or a Section 505(b)(2) NDA referencing a drug listed in the Orange Book must certify to the FDA that (1) no patent information on the drug product that is the subject of the application has been submitted to the FDA; (2) such patent has expired; (3) the date on which such patent expires; or (4) such patent is invalid or will not be infringed upon by the manufacture, use or sale of the drug product for which the application is submitted. This last certification is known as a paragraph IV certification. A notice of the paragraph IV certification must be provided to each owner of the patent that is the subject of the certification and to the holder of the approved NDA to which the ANDA or Section 505(b)(2) application refers. The applicant may also elect to submit a "section viii" statement certifying that its proposed label does not contain (or carves out) any language regarding the patented method-of-use rather than certify to a listed method-of-use patent.

If the NDA holder for the reference drug and/or patent owners assert a patent challenge directed to one of the Orange Book listed patents within 45 days of the receipt of the paragraph IV certification notice, the FDA is prohibited from approving the application until the earlier of 30 months from the receipt of the paragraph IV certification, expiration of the patent, settlement of the lawsuit, or a decision in the infringement case that is favorable to the applicant. The ANDA or Section 505(b)(2) application also will not be approved until any applicable non-patent exclusivity listed in the Orange Book for the reference drug has expired as described in further detail below.

Non-Patent Exclusivity

In addition to patent exclusivity, the holder of an NDA for a listed drug may be entitled to a period of non-patent exclusivity, during which the FDA cannot approve an ANDA or Section 505(b)(2) application that relies on the listed drug. For example, a pharmaceutical manufacturer may obtain five years of non-patent exclusivity upon FDA approval of a new chemical entity, or NCE, which is a drug that contains an active moiety that has not been approved by the FDA in any other NDA. An "active moiety" is defined as the molecule or ion responsible for the drug substance's physiological or pharmacologic action. During the five year exclusivity period, the FDA

cannot accept for filing any ANDA seeking approval of a generic version of that drug or any Section 505(b)(2) NDA for the same active moiety and that relies on the FDA's findings regarding that drug, except that the FDA may accept an application for filing after four years if the follow-on applicant makes a paragraph IV certification. Five-year NCE exclusivity does not block the submission, review or approval of a 505(b)(1) NDA.

Patent Term Extension

After NDA approval, owners of relevant drug patents may apply for up to a five-year patent extension. The allowable PTE is calculated as half of the drug's testing phase—the time between IND application and NDA submission—plus all of the review phase—the time between NDA submission and approval up to a maximum of five years. The time can be shortened if the FDA determines that the applicant did not pursue approval with due diligence. The total patent term after the extension may not exceed 14 years.

For patents that might expire during the application phase, the patent owner may request an interim patent extension. An interim patent extension increases the patent term by one year and may be renewed up to four times. For each interim patent extension granted, the post-approval patent extension is reduced by one year. The director of the U.S. PTO must determine that approval of the drug covered by the patent for which a patent extension is being sought is likely. Interim patent extensions are not available for a drug for which an NDA has not been submitted.

Government Regulation

FDA Approval Process

In the United States, pharmaceutical products are subject to extensive regulation by FDA. The Federal Food, Drug and Cosmetic Act and other federal and state statutes and regulations govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling and import and export of pharmaceutical products. Failure to comply with applicable U.S. requirements may subject a company to a variety of administrative or judicial sanctions, such as FDA refusal to approve pending NDAs, warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties and criminal prosecution.

Pharmaceutical product development for a new product or certain changes to an approved product in the U.S. typically involves preclinical laboratory and animal tests, the submission to FDA of an investigational new drug application, or IND, which must become effective before clinical testing may commence, and adequate and well-controlled clinical trials to establish the safety and effectiveness of the drug for each indication for which FDA approval is sought. Satisfaction of FDA pre-market approval requirements typically takes many years and the actual time required may vary substantially based upon the type, complexity and novelty of the product or disease.

Preclinical tests include laboratory evaluation of product chemistry, formulation and toxicity, as well as animal trials to assess the characteristics and potential safety and efficacy of the product. The conduct of the preclinical tests must comply with federal regulations and requirements, including good laboratory practices. The results of preclinical testing are submitted to FDA as part of an IND along with other information, including information about product chemistry, manufacturing and controls, and a proposed clinical trial protocol. Long-term preclinical tests, such as animal tests of reproductive toxicity and carcinogenicity, may continue after the IND is submitted.

A 30-day waiting period after the submission of each IND is required prior to the commencement of clinical testing in humans. If FDA has neither commented on nor questioned the IND within this 30-day period, the clinical trial proposed in the IND may begin.

Clinical trials involve the administration of the investigational new drug to healthy volunteers or patients under the supervision of a qualified investigator. Clinical trials must be conducted: (i) in compliance with federal regulations; (ii) in compliance with good clinical practice, or GCP, an international standard meant to protect the rights and health of patients and to define the roles of clinical trial sponsors, administrators and monitors; as well as (iii) under protocols detailing the objectives of the trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. Each protocol involving testing on U.S. patients and subsequent protocol amendments must be submitted to FDA as part of the IND.

FDA may order the temporary, or permanent, discontinuation of a clinical trial at any time, or impose other sanctions, if it believes that the clinical trial either is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial patients. The study protocol and informed consent information for patients in clinical trials must also be submitted to an institutional review board, or IRB, for approval. An IRB may also require the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the IRB's requirements, or may impose other conditions.

Clinical trials to support NDAs for marketing approval are typically conducted in three sequential phases, but the phases may overlap. In Phase 1, the initial introduction of the drug into healthy human patients, the drug is tested to assess metabolism, pharmacokinetics, pharmacological actions, side effects associated with increasing doses, and, if possible, early evidence of effectiveness. Phase 2 usually involves trials in a limited patient population to determine the effectiveness of the drug for a particular indication, dosage tolerance and optimum dosage, and to identify common adverse effects and safety risks. If a compound demonstrates evidence of effectiveness and an acceptable safety profile in Phase 2 evaluations, Phase 3 trials are undertaken to obtain the additional information about clinical efficacy and safety in a larger number of patients, typically at geographically dispersed clinical trial sites, to permit FDA to evaluate the overall benefit-risk relationship of the drug and to provide adequate information for the labeling of the drug. In most cases FDA requires two adequate and well-controlled Phase 3 clinical trials to demonstrate the efficacy of the drug. A single Phase 3 trial with other confirmatory evidence may be sufficient in rare instances where the study is a large multicenter trial demonstrating internal consistency and a statistically very persuasive finding of a clinically meaningful effect on mortality, irreversible morbidity or prevention of a disease with a potentially serious outcome and confirmation of the result in a second trial would be practically or ethically impossible.

After completion of the required clinical testing, an NDA is prepared and submitted to FDA. FDA approval of the NDA is required before marketing of the product may begin in the U.S. The NDA must include the results of all preclinical, clinical and other testing and a compilation of data relating to the product's pharmacology, chemistry, manufacture and controls. The cost of preparing and submitting an NDA is substantial, and the fees are typically increased annually.

FDA has 60 days from its receipt of an NDA to determine whether the application will be accepted for filing based on the agency's threshold determination that it is sufficiently complete to permit substantive review. Once the submission is accepted for filing, FDA begins an in-depth review. FDA has agreed to certain performance goals in the review of new drug applications to encourage timeliness. Most applications for standard review drug products are reviewed within twelve months from submission; most applications for priority review drugs are reviewed within eight months from submission. Priority review can be applied to drugs that FDA determines offer major advances in treatment, or provide a treatment where no adequate therapy exists. The review process for both standard and priority review may be extended by FDA for three additional months to consider certain late-submitted information, or information intended to clarify information already provided in the submission.

FDA may also refer applications for novel drug products, or drug products that present difficult questions of safety or efficacy, to an outside advisory committee—typically a panel that includes clinicians and other experts—for review, evaluation and a recommendation as to whether the application should be approved. FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations.

Before approving an NDA, FDA will typically inspect one or more clinical sites to assure compliance with GCP. Additionally, FDA will inspect the facility or the facilities at which the drug is manufactured. FDA will not approve the product unless compliance with current good manufacturing practice, or GMP—a quality system regulating manufacturing—is satisfactory and the NDA contains data that provide substantial evidence that the drug is safe and effective in the indication studied.

After FDA evaluates the NDA and the manufacturing facilities, it issues either an approval letter or a complete response letter. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing, or information, in order for FDA to reconsider the application. If, or when, those deficiencies have been addressed to FDA's satisfaction in a resubmission of the NDA, FDA will issue an approval letter. FDA has committed to reviewing such resubmissions in two or six months depending on the type of information included.

An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. As a condition of NDA approval, FDA may require a risk evaluation and mitigation strategy, or REMS, to help ensure that the benefits of the drug outweigh the potential risks. REMS can include medication guides, communication plans for healthcare professionals, and elements to assure safe use, or ETASU. ETASU can include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring and the use of patient registries. The requirement for a REMS can materially affect the potential market and profitability of the drug. Moreover, product approval may require substantial post-approval testing and surveillance to monitor the drug's safety or efficacy. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing.

Changes to some of the conditions established in an approved application, including changes in indications, labeling, or manufacturing processes or facilities, require submission and FDA approval of a new NDA or NDA supplement before the change can be implemented. An NDA supplement for a new indication typically requires clinical data similar to that in the original application, and FDA uses the same procedures and actions in reviewing NDA supplements as it does in reviewing NDAs.

Fast Track Designation and Accelerated Approval

FDA is required to facilitate the development, and expedite the review, of drugs that are intended for the treatment of a serious or life-threatening disease or condition for which there is no effective treatment and which demonstrate the potential to address unmet medical needs for the condition. Under the Fast Track program, the sponsor of a new product candidate may request that FDA designate the product candidate for a specific indication as a Fast Track drug concurrent with, or after, the filing of the IND for the product candidate. FDA must determine if the product candidate qualifies for Fast Track Designation within 60 days of receipt of the sponsor's request.

Under the Fast Track program and FDA's accelerated approval regulations, FDA may approve a drug for a serious or life-threatening illness that provides meaningful therapeutic benefit to patients over existing treatments based upon a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments.

In clinical trials, a surrogate endpoint is a measurement of laboratory or clinical signs of a disease or condition that substitutes for a direct measurement of how a patient feels, functions, or survives. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. A product candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct

required post-approval studies, or confirm a clinical benefit during post-marketing studies, will allow FDA to withdraw the drug from the market on an expedited basis. All promotional materials for product candidates approved under accelerated regulations are subject to priority review by FDA.

If a submission is granted Fast Track Designation, the sponsor may engage in more frequent interactions with FDA, and FDA may review sections of the NDA before the application is complete. This rolling review is available if the applicant provides, and FDA approves, a schedule for the submission of the remaining information and the applicant pays applicable user fees. However, FDA's time period goal for reviewing an application does not begin until the last section of the NDA is submitted. Additionally, Fast Track Designation may be withdrawn by FDA if FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

Breakthrough Therapy Designation

FDA is also required to expedite the development and review of the application for approval of drugs that are intended to treat a serious or life-threatening disease or condition where preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints. Under the Breakthrough Therapy program, the sponsor of a new product candidate may request that FDA designate the product candidate for a specific indication as a breakthrough therapy concurrent with, or after, the filing of the IND for the product candidate. FDA must determine if the product candidate qualifies for Breakthrough Therapy designation within 60 days of receipt of the sponsor's request.

Orphan Drug Designation and Exclusivity

The Orphan Drug Act provides incentives for the development of products intended to treat rare diseases or conditions. Under the Orphan Drug Act, the FDA may grant orphan designation to a drug intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making a drug available in the United States for this type of disease or condition will be recovered from sales of the product. If a sponsor demonstrates that a drug is intended to treat a rare disease or condition, the FDA will grant orphan designation for that product for the orphan disease indication, assuming that the same drug has not already been approved for the indication for which the sponsor is seeking orphan designation. If the same drug has already been approved for the indication for which the sponsor is seeking orphan designation, the sponsor must present a plausible hypothesis of clinical superiority in order to obtain orphan designation. Orphan designation must be requested before submitting an NDA. After the FDA grants orphan designation, the FDA discloses the identity of the therapeutic agent and its potential orphan use.

Orphan designation may provide manufacturers with benefits such as research grants, tax credits, PDUFA application fee waivers, and eligibility for orphan drug exclusivity. If a product that has orphan designation subsequently receives the first FDA approval of the active moiety for that disease or condition for which it has such designation, the product is entitled to orphan drug exclusivity, which for seven years prohibits the FDA from approving another product with the same active ingredient for the same indication, except in limited circumstances. Orphan drug exclusivity will not bar approval of another product under certain circumstances, including if a subsequent product with the same active ingredient for the same indication is shown to be clinically superior to the approved product on the basis of greater efficacy or safety, or providing a major contribution to patient care, or if the company with orphan drug exclusivity is not able to meet market demand. Further, the FDA may approve more than one product for the same orphan indication or disease as long as the products contain different active ingredients. Moreover, competitors may receive approval of different products for the indication for which the orphan drug has exclusivity or obtain approval for the same product but for a different indication for which the orphan drug has exclusivity.

In the European Union, orphan drug designation also entitles a party to financial incentives such as reduction of fees or fee waivers and 10 years of market exclusivity is granted following drug or biological product approval. This period may be reduced to 6 years if the orphan drug designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity.

Orphan drug designation must be requested before submitting an application for marketing approval. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

Post-Approval Requirements

Once an NDA is approved, a product will be subject to certain post-approval requirements. For instance, FDA closely regulates the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational activities and promotional activities involving the internet. Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved labeling.

Adverse event reporting and submission of periodic reports are required following FDA approval of an NDA. FDA also may require post-marketing testing, known as Phase 4 testing, risk evaluation and mitigation strategies, or REMS, and surveillance to monitor the effects of an approved product, or FDA may place conditions on an approval that could restrict the distribution or use of the product. In addition, quality control, drug manufacture, packaging and labeling procedures must continue to conform to current good manufacturing practices, or cGMPs, after approval. Drug manufacturers and certain of their subcontractors are required to register their establishments with FDA and certain state agencies. Registration with FDA subjects entities to periodic unannounced inspections by FDA, during which the Agency inspects manufacturing facilities to assess compliance with cGMPs. Accordingly, manufacturers must continue to expend time, money and effort in the areas of production and quality-control to maintain compliance with cGMPs. Regulatory authorities may withdraw product approvals or request product recalls if a company fails to comply with regulatory standards, if it encounters problems following initial marketing, or if previously unrecognized problems are subsequently discovered.

Pediatric Information

Under the Pediatric Research Equity Act, or PREA, NDAs or supplements to NDAs must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the drug is safe and effective. FDA may grant full or partial waivers, or deferrals, for submission of data. Unless otherwise required by regulation, PREA does not apply to any drug for an indication for which orphan designation has been granted.

The Best Pharmaceuticals for Children Act, or BPCA, provides NDA holders a six-month extension of any exclusivity—patent or non-patent—for a drug if certain conditions are met. Conditions for exclusivity include FDA's determination that information relating to the use of a new drug in the pediatric population may produce health benefits in that population, FDA making a written request for pediatric studies, and the applicant agreeing to perform, and reporting on, the requested studies within the statutory timeframe. Applications under the BPCA are treated as priority applications, with all of the benefits that designation confers.

FDA Regulation of Companion Diagnostics

Our drug products may rely upon in vitro companion diagnostics for use in selecting the patients that we believe will respond to our cancer therapeutics. If safe and effective use of a therapeutic product depends on an in

vitro diagnostic, FDA generally will require approval or clearance of the diagnostic at the same time that FDA approves the therapeutic product. This policy is described in an August 2014 FDA guidance document.

FDA has required in vitro companion diagnostics intended to select the patients who will respond to cancer treatment to obtain a pre-market approval, or PMA, for that diagnostic simultaneously with approval of the drug. We believe that FDA will require PMA approval of one or more in vitro companion diagnostics to identify patient populations suitable for our cancer therapies. The review of these in vitro companion diagnostics in conjunction with the review of our cancer treatments involves coordination of review by FDA's Center for Drug Evaluation and Research and by FDA's Center for Devices and Radiological Health.

The PMA process, including the gathering of clinical and nonclinical data and the submission to and review by FDA, can take several years or longer. It involves a rigorous premarket review during which the applicant must prepare and provide FDA with reasonable assurance of the device's safety and effectiveness and information about the device and its components regarding, among other things, device design, manufacturing and labeling. PMA applications are subject to an application fee. In addition, PMAs for certain devices must generally include the results from extensive preclinical and adequate and well-controlled clinical trials to establish the safety and effectiveness of the device for each indication for which FDA approval is sought. In particular, for a diagnostic, the applicant must demonstrate that the diagnostic produces reproducible results when the same sample is tested multiple times by multiple users at multiple laboratories. As part of the PMA review, FDA will typically inspect the manufacturer's facilities for compliance with the Quality System Regulation, or QSR, which imposes elaborate testing, control, documentation and other quality assurance requirements.

PMA approval is not guaranteed, and FDA may ultimately respond to a PMA submission with a not approvable determination based on deficiencies in the application and require additional clinical trial or other data that may be expensive and time-consuming to generate and that can substantially delay approval. If FDA's evaluation of the PMA application is favorable, FDA typically issues an approvable letter requiring the applicant's agreement to specific conditions, such as changes in labeling, or specific additional information, such as submission of final labeling, in order to secure final approval of the PMA. If FDA concludes that the applicable criteria have been met, FDA will issue a PMA for the approved indications, which can be more limited than those originally sought by the applicant. The PMA can include post-approval conditions that FDA believes necessary to ensure the safety and effectiveness of the device, including, among other things, restrictions on labeling, promotion, sale and distribution.

After a device is placed on the market, it remains subject to significant regulatory requirements. Medical devices may be marketed only for the uses and indications for which they are cleared or approved. Device manufacturers must also establish registration and device listings with FDA. A medical device manufacturer's manufacturing processes and those of its suppliers are required to comply with the applicable portions of the QSR, which cover the methods and documentation of the design, testing, production, processes, controls, quality assurance, labeling, packaging and shipping of medical devices. Domestic facility records and manufacturing processes are subject to periodic unscheduled inspections by FDA. FDA also may inspect foreign facilities that export products to the United States.

Failure to comply with applicable regulatory requirements can result in enforcement action by FDA, which may include any of the following sanctions: warning letters, fines, injunctions, civil or criminal penalties, recall or seizure of current or future products, operating restrictions, partial suspension or total shutdown of production, denial of submissions for new products, or withdrawal of PMA approvals.

Clinical Trials and IDEs

A clinical trial is almost always required to support a PMA application. In some cases, one or more smaller Investigational Device Exemption (IDE) studies may precede a pivotal clinical trial intended to demonstrate the safety and efficacy of the investigational device.

All clinical studies of investigational devices must be conducted in compliance with the FDA's requirements. If an investigational device could pose a significant risk to patients pursuant to FDA regulations, the FDA must approve an IDE application prior to initiation of investigational use. IVD trials usually do not require an IDE, as the FDA does not judge them to be a significant risk because the results do not affect the patients in the study. However, for a trial where the IVD result directs the therapeutic care of patients with cancer, we believe that the FDA may consider the investigation to present significant risk and require an IDE application.

An IDE application must be supported by appropriate data, such as laboratory test results, showing that it is safe to test the device in humans and that the testing protocol is scientifically sound. The FDA typically grants IDE approval for a specified number of patients. A non-significant risk device does not require FDA approval of an IDE. Both significant risk and non-significant risk investigational devices require approval from IRBs at the study centers where the device will be used.

During the critical trial, the sponsor must comply with the FDA's IDE requirements for investigator selection, trial monitoring, reporting and record keeping. The investigators must obtain patient informed consent, rigorously follow the investigational plan and study protocol, control the disposition of investigational devices and comply with all reporting and record keeping requirements. Prior to granting PMA approval, the FDA typically inspects the records relating to the conduct of the study and the clinical data supporting the PMA application for compliance with applicable requirements.

Although the QSR does not fully apply to investigational devices, the requirement for controls on design and development does apply. The sponsor also must manufacture the investigational device in conformity with the quality controls described in the IDE application and any conditions of IDE approval that the FDA may impose with respect to manufacturing.

Foreign Regulation

In addition to regulations in the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our product candidates to the extent we choose to sell any products outside of the United States. Whether or not we obtain FDA approval for a product, we must obtain approval of a product by regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The approval process varies from country to country and the time may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country. As in the United States, post-approval regulatory requirements, such as those regarding product manufacture, marketing, or distribution would apply to any product that is approved outside the United States.

Government authorities in the United States, at the federal, state and local level, and in other countries, extensively regulate, among other things, the research, development, testing, manufacture, including any manufacturing changes, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, import and export of pharmaceutical products, such as those we are developing.

Additional Regulations and Environmental Matters

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal laws restrict certain marketing practices in the pharmaceutical industry in recent years. These laws, which generally will not be applicable to us or our product candidates unless and until we obtain FDA marketing approval for any of our product candidates, include transparency laws, anti-kickback statutes, false claims statutes and regulation regarding providing drug samples.

The federal healthcare program anti-kickback statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid or other federally financed healthcare programs. Violations of the federal anti-kickback statute are punishable by imprisonment, criminal fines, civil monetary penalties and exclusion from participation in federal healthcare programs.

Federal false claims laws prohibit any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government, or knowingly making, or causing to be made, a false statement to have a false claim paid. Recently, several pharmaceutical companies have been prosecuted under these laws for allegedly inflating drug prices they report to pricing services, which in turn were used by the government to set Medicare and Medicaid reimbursement rates, and for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. In addition, certain marketing practices, including off-label promotion, may also violate false claims laws.

The majority of states also have statutes or regulations similar to the federal anti-kickback law and false claims laws, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

Further, sales of any of our product candidates that may be approved will depend, in part, on the extent to which the cost of the product will be covered by third party payors. Third party payors may limit coverage to an approved list of products, or formulary, which might not include all drug products approved by the FDA for an indication. Any product candidates for which we obtain marketing approval may not be considered medically necessary or cost-effective by third party payors, and we may need to conduct expensive pharmacoeconomic studies in the future to demonstrate the medical necessity and/or cost effectiveness of any such product. The U.S. government, state legislatures and foreign governments have shown increased interest in implementing cost containment programs to limit government-paid health care costs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Continued interest in and adoption of such controls and measures, and tightening of restrictive policies in jurisdictions with existing controls and measures, could limit payments for pharmaceuticals such as the product candidates we are developing.

In addition to regulatory schemes that apply, or may in the future apply, to our business, we are or may become subject to various environmental, health and safety laws and regulations governing, among other things, laboratory procedures and any use and disposal by us of hazardous or potentially hazardous substances in connection with our research and development activities. We do not presently expect such environmental, health and safety laws or regulations to materially impact our present or planned future activities.

Employees

As of May 31, 2015, we have 16 full-time employees and four part-time employees, including eight employees with M.D. or Ph.D. degrees. None of our employees is represented by a labor union or covered by a collective bargaining agreement. We consider our relationship with our employees to be good.

Facilities

We occupy approximately 1,560 rentable square feet of office and laboratory space in La Jolla, California under a sublease that expires in August 2016. We also occupy two offices in Cambridge, Massachusetts under sublease that expires in October 2016. We believe that our facilities are sufficient to meet our current needs and that suitable additional space will be available as and when needed.

Legal Proceedings

We are not currently a party to, nor is our property the subject of, any material legal proceedings.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of the financial condition and results of operations of Kura Oncology, Inc. should be read in conjunction with the financial statements and the notes to those statements appearing at the end of this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should read the "Risk Factors" section of this prospectus for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

Effective as of March 6, 2015, we consummated the Merger and changed our name from "Zeta Acquisition Corp. III" to "Kura Oncology, Inc." In addition, on March 31, 2015 we consummated the Upstream Merger.

We are a clinical stage biopharmaceutical company discovering and developing personalized therapeutics for the treatment of solid tumors and blood cancers. We focus on the development of small molecule product candidates that target cell signaling pathways that are important to driving the progression of certain cancers. We aim to employ molecular diagnostics to identify patients with cancers who are likely to benefit from our targeted product candidates.

Our lead product candidate, tipifarnib, is a farnesyl transferase inhibitor that we are evaluating as a treatment for patients with certain solid tumors, including thyroid, head and neck, urothelial, and salivary cancers, with mutations in the HRAS oncogene. Collectively, the annual incidence of these cancers containing HRAS mutations is approximately 8,000 patients per year in the United States, and, in general, patients with these cancers have poor prognoses and limited options for treatment. We are also evaluating tipifarnib as a potential treatment for patients with peripheral T-cell lymphoma, which has an annual incidence of approximately 7,000-10,000 patients in the United States.

We are advancing a set of compounds that inhibit the activity of extracellular-signal-regulated kinases 1 and 2 (ERK1/2), including our lead candidate KO-947 as well as backup compounds, as a potential treatment for patients with tumors that have mutations in or other dysregulation of the mitogen-activated protein kinase, or MAPK, signaling pathway, including mutations in the proteins KRAS, BRAF and NRAS. The cancer indications that frequently harbor mutations in the MAPK pathway include lung cancer, colorectal cancer, pancreatic cancer, and melanoma.

We are also advancing a set of orally available, small molecule compounds that inhibit the interaction between the proteins menin and MLL for the treatment of MLL-r and MLL-PTD, two genetically-defined subsets of acute leukemias that affect both adults and children. The annual incidence of MLL-r and MLL-PTD patients is estimated to be 3,200 patients in the United States, and those patients currently have limited options other than chemotherapy.

We have incurred net losses since our inception. Our net loss and accumulated deficit was $8.1 million as of March 31, 2015. We expect to continue to incur significant expenses and increasing operating losses for at least the next several years as we continue the clinical development of, and seek regulatory approval, for our product candidates. Our net losses may fluctuate significantly from quarter to quarter and year to year. We will need to raise capital for the further development of our existing product candidates and we may also need to raise additional funds sooner than expected to pursue other development activities related to our other pipeline programs. As of March 31, 2015, we had a cash balance of $53.6 million. We may seek to obtain additional financing in the future through the issuance of our common stock, through other equity or debt financings or

through collaborations or partnerships with other companies. We may not be able to raise additional capital on terms acceptable to us, or at all, and any failure to raise capital as and when needed could compromise our ability to execute on our business plan.

Recent Developments

Private Placement

Prior to the Merger, Prior Kura sold to accredited investors approximately $60.0 million of its shares of common stock, or 18,971,136 shares, at a price of $3.16 per share (as adjusted to $6.32 per share after giving effect to the Merger), which included approximately $7.5 million in principal and $0.1 million in accrued interest from the conversion of Prior Kura's then outstanding convertible promissory notes. Also, Prior Kura granted the investors in the Private Placement registration rights requiring Prior Kura or any successor to register those shares of Prior Kura common stock (which were exchanged for shares of our common stock, along with the rest of the outstanding shares of Prior Kura capital stock, except for dissenting shares, at the Effective Time) for public resale, as described in more detail below. The then existing stockholders of Prior Kura who agreed to become parties to the registration rights agreement also became entitled to such registration rights, subject to specified differences in the agreement between the rights of new investors and existing stockholders. The Private Placement closed immediately prior to the filing of a Certificate of Merger with the Secretary of State of the State of Delaware, on March 6, 2015.

Reverse Merger

On March 6, 2015, pursuant to the Merger Agreement, Merger Sub merged with and into Prior Kura, with Prior Kura remaining as the surviving entity and a wholly-owned operating subsidiary of the Company. The Merger was effective on March 6, 2015, upon the filing of a Certificate of Merger with the Secretary of State of the State of Delaware. As part of the Merger, Prior Kura changed its name to Kura Operations, Inc. On March 31, 2015, Kura Operations, Inc. merged with and into us and we continued as the surviving entity.

At the Effective Time, the legal existence of Merger Sub ceased and each share of Prior Kura common stock that was issued and outstanding immediately prior to the Effective Time was automatically exchanged for 0.5 shares of our common stock. We issued an aggregate of 14,508,177 shares of our common stock upon such exchange of the outstanding shares of Prior Kura common stock. In addition, at the Effective Time, we assumed Prior Kura's 2014 Equity Incentive Plan and concurrently approved the amendment and restatement of Prior Kura's 2014 Equity Incentive Plan, which became effective in April 2015. As of the Effective Time, there were no outstanding options to purchase shares of Prior Kura common stock under the Prior Kura 2014 Equity Incentive Plan.

Immediately following the Effective Time, pursuant to the terms of the Redemption Agreement, we completed the closing of a redemption of 5,000,000 shares of our common stock from our then-current stockholders in consideration of $70,000, plus $30,000 in professional costs related to the transaction. The 5,000,000 shares constituted all of the issued and outstanding shares of our capital stock, on a fully-diluted basis, immediately prior to the Merger.

Prior Kura is considered the accounting acquirer in the Merger and will account for the transaction as a capital transaction because Prior Kura's former stockholders received 100% of the voting rights in the combined entity and Prior Kura's senior management represents all of the senior management of the combined entity.

Financial Operations Overview

Research and Development Expenses

We focus on the research and development of our product programs. Our research and development expenses consist of salaries, benefits and other personnel costs, preclinical and clinical trial costs, manufacturing

costs for non-commercial products and research and development facilities costs. All such costs are charged to research and development expense as incurred when these expenditures have no alternative future uses. Payments that we make in connection with in-licensed technology for a particular research and development project that have no alternative future uses (in other research and development projects or otherwise) and therefore no separate economic values are expensed as research and development costs at the time such costs are incurred. As of March 31, 2015, we have no in-licensed technologies that have alternative future uses in research and development projects or otherwise.

As of March 31, 2015, we had incurred an aggregate of approximately $6.3 million in research and development expenses related to the in-licensing and development of our product candidates and pipeline programs. To date, our tipifarnib program represents the largest portion of our research and development expense. We cannot determine with certainty the timing of initiation, the duration or the completion costs of current or future preclinical studies and clinical trials of our product candidates. At this time, due to the inherently unpredictable nature of preclinical and clinical development, we are unable to estimate with any certainty the costs we will incur and the timelines we will require in the continued development of our product candidates and our other pipeline programs. Clinical and preclinical development timelines, the probability of success and development costs can differ materially from expectations. Our future research and development expenses will depend on the preclinical and clinical success of each product candidate that we develop, as well as ongoing assessments of the commercial potential of such product candidates. In addition, we cannot forecast which product candidates may be subject to future collaborations, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements.

Completion of clinical trials may take several years or more, and the length of time generally varies according to the type, complexity, novelty and intended use of a product candidate. The cost of clinical trials may vary significantly over the life of a project as a result of differences arising during clinical development, including, among others:

- per patient trial costs;
- the number of trials required for approval;
- the number of sites included in the trials;
- the length of time required to enroll suitable patients;
- the number of doses that patients receive;
- the number of patients that participate in the trials;
- the drop-out or discontinuation rates of patients;
- the duration of patient follow-up;
- potential additional safety monitoring or other studies requested by regulatory agencies;
- the number and complexity of analyses and tests performed during the trial;
- the phase of development of the product candidate; and
- the efficacy and safety profile of the product candidate.

We expect to incur substantial research and development expenses during the remainder of 2015 based on increased clinical development activities for our tipifarnib program and research and development for our other programs.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries, benefits and other personnel costs for employees in executive, finance, business development and support functions. Other significant general and administrative expenses include the costs associated with obtaining and maintaining our patent portfolio, professional fees for accounting, auditing, consulting and legal services, travel and allocated facilities.

We expect that our general and administrative expenses will increase in the future as we expand our operating activities, maintain and expand our patent portfolio.

Other Income (Expense)

Other income (expense) consists primarily of management fee income and non-cash interest expense. Management fee income is earned in accordance with the management services agreement with our affiliated company Araxes. Interest expense consists of interest accrued on convertible notes.

Income Taxes

We have incurred net losses and have not recorded any U.S. federal or state income tax benefits for the losses as they have been offset by valuation allowances.

Critical Accounting Policies and Significant Judgments and Estimates of the Company

Management's discussion and analysis of our financial condition and results of operations are based on our financial statements and the financial statements of Prior Kura, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements required estimates and judgments that affect the reported amounts of assets, liabilities, and expenses and the disclosure of contingent assets and liabilities in the financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to accrued expenses and stock-based compensation. We base our estimates on historical experience, known trends and events, and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in the notes to our financial statements and Prior Kura's financial statements appearing elsewhere in this prospectus, we believe the following accounting policies are the most critical to the judgments and estimates used in the preparation of our financial statements.

Convertible Notes and Derivative Accounting

At inception, we perform an assessment of all embedded features of a debt instrument to determine if 1) such features should be bifurcated and separately accounted for, and, 2) if bifurcation requirements are met, whether such features should be classified and accounted for as equity or liability. The fair value of the embedded feature is measured initially, included as a liability on the balance sheet, and remeasured each reporting period. Any changes in fair value are recorded in the statement of operations. We monitor, on an ongoing basis, whether events or circumstances could give rise to a change in our classification of embedded features.

We account for our convertible notes, that may be settled in cash upon conversion (including partial cash settlement), by separating the liability and equity components of the instruments in a manner that reflects our nonconvertible debt borrowing rate. We determine the carrying amount of the liability component by measuring the fair value of similar debt instruments that do not have the conversion feature. If a similar debt instrument does not exist, we estimate the fair value by using assumptions that market participants would use in pricing a debt instrument, including market interest rates, credit standing, yield curves and volatilities. Determining the fair value of the debt component requires the use of accounting estimates and assumptions. These estimates and assumptions are judgmental in nature and could have a significant impact on the determination of the debt component and the associated non-cash interest expense.

We assign a value to the debt component of our convertible notes equal to the estimated fair value of similar debt instruments without the conversion feature, which resulted in us recording the debt at a discount. We amortize the debt discount over the life of the convertible notes as additional non-cash interest expense utilizing the effective interest method.

Research and Development Expenses

We make estimates of our accrued expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us at that time. If the actual timing of the performance of services or the level of effort varies from the estimate, we will adjust the accrual accordingly. Nonrefundable advance payments for goods and services, including fees for process development or manufacturing and distribution of clinical supplies that will be used in future research and development activities, are deferred and recognized as expense in the period that the related goods are consumed or services are performed. Payments that we make in connection with in-licensed technology for a particular research and development project that have no alternative future uses (in other research and development projects or otherwise) and therefore no separate economic values are expensed as research and development costs at the time such costs are incurred.

Results of Operations

The Year Ended December 31, 2014

Prior Kura was incorporated in August 2014 and thus had no operations prior to August 2014. We refer to the period from August 2014 (inception) to December 2014 as the year ended December 31, 2014.

The following table sets forth Prior Kura's results of operations for the year ended December 31, 2014:

	Year Ended December 31, 2014
Research and development	$ 2,653,000
General and administrative	1,281,000
Other income, net	263,000

Research and Development Expenses. Prior Kura's research and development expenses were $2.7 million for the year ended December 31, 2014. Research and development expenses for the year ended December 31, 2014 were primarily comprised of $1.8 million in license fees related to the acquisition of in-process research and development. In addition, other research and development expenses included $0.4 million of payroll related expenses and $0.2 million of share-based compensation, as well as other expenses as Prior Kura expanded its operations.

General and Administrative Expenses. General and administrative expenses were $1.3 million for the year ended December 31, 2014. General and administrative expenses are comprised of $0.3 million of payroll related expenses, $0.6 million of professional and consulting fees and a $0.3 million gift to the Leukemia and Lymphoma Society in connection with our license agreement with University of Michigan.

Management Fee Income, Related Party. Management fee income, related party was $0.3 million for the year ended December 31, 2014. In accordance with the management services agreement with Araxes, we receive a fixed monthly fee of $0.1 million for management services. The agreement has an initial term expiring on December 31, 2015 and renews automatically for additional consecutive one-year periods. The agreement may be terminated by either party with a notice of at least 30 days prior to December 31, 2015 or the expiration of the then-renewal term.

Interest Expense. Interest expense was $37,000 for the year ended December 31, 2014. The interest expense incurred during the year ended December 31, 2014 is primarily related to the convertible notes, which were converted into shares of Prior Kura's common stock in connection with the Private Placement.

Three Months Ended March 31, 2015

Prior Kura was incorporated in August 2014; therefore, there were no operations for the three months ended March 31, 2014.

Research and Development Expenses. Research and development expenses were $3.6 million for the three months ended March 31, 2015. Research and development expenses for the three months ended March 31, 2015 were primarily comprised of $1.4 million in outsourced research contracts, $0.6 million in license fees related to in-process research and development, $0.6 million in share-based compensation related to stock awards to consultants, $0.5 million in compensation and related personnel costs and $0.4 million in outsourced manufacturing and clinical trial costs.

General and Administrative Expenses. General and administrative expenses were $1.1 million for the three months ended March 31, 2015. General and administrative expenses included $0.5 million in compensation costs and $0.3 million in professional and consulting fees.

Management Fee Income, Related Party. Management fee income, related party was $0.3 million for the three months ended March 31, 2015. In accordance with the management services agreement with Araxes, we receive a fixed monthly fee of $0.1 million for management services.

Liquidity and Capital Resources

Since our inception, we have funded our operations primarily through sales of our common stock and convertible notes. We have devoted our resources to funding research and development programs, including discovery research, preclinical and clinical development activities. We have incurred operating losses since inception and negative cash flows from operating activities. As of March 31, 2015, we had an accumulated deficit of $8.1 million. We expect to continue to incur operating losses for the foreseeable future as we continue the development and potential commercialization of our product candidates.

As of March 31, 2015, we had a cash balance of $53.6 million. Prior to the Merger, on March 6, 2015, Prior Kura received net proceeds of $48.6 million, net of financing costs of $3.7 million, from the sale of common stock in the Private Placement. In addition, since inception through the Merger, Prior Kura received cash proceeds of $7.0 million from the sale of convertible notes. For a more detailed discussion of the Private Placement and the Merger, see “Recent Developments—Private Placement” and “Recent Developments—Reverse Merger” above.

While we believe that our existing cash resources will be sufficient to fund our cash requirements for the next 12 months, we will require significant additional financing in the future to continue to fund our operations. We may seek to obtain additional financing in the future through equity or debt financings or through collaborations or partnerships with other companies. If we are unable to obtain additional financing on commercially reasonable terms, our business, financial condition and results of operations will be materially adversely affected.

The following table provides a summary of Prior Kura’s net cash flow activity for the periods set forth below:

	Year Ended December 31, 2014	Three Months Ended March 31, 2015
		(Unaudited)
Net cash used in operating activities	$ (849,000)	$ (4,123,000)
Net cash used in investing activities	(28,000)	(10,000)
Net cash provided by financing activities	2,001,000	56,580,000
Net increase in cash	1,124,000	52,447,000

Cash used in operating activities

Cash used in operating activities was $4.1 million for the three months ended March 31, 2015. Cash used in operating activities during the three months ended March 31, 2015 primarily consisted of $4.5 million of net losses incurred. Cash used in operating activities was further adjusted for non-cash items such as license fees of $0.5 million, share-based compensation expenses of $0.6 million and net cash outflows from changes in our operating assets and liabilities of $0.9 million.

Cash used in operating activities was $0.8 million for the year ended December 31, 2014. Cash used in operating activities during the year ended December 31, 2014 primarily consisted of $3.7 million of net losses incurred. Cash used in operating activities was further adjusted for non-cash items such as an asset acquisition of $0.5 million, share-based compensation expenses of $0.2 million and net cash inflows from a change in our operating assets and liabilities of $2.1 million.

Cash used in investing activities

Net cash used in investing activities was $10,000 for the three months ended March 31, 2015, which consisted of the purchase of fixed assets.

Net cash used in investing activities was $28,000 for the year ended December 31, 2014, which consisted of the purchase of fixed assets.

Cash provided by financing activities

Net cash provided from financing activities was $56.6 million for the three months ended March 31, 2015. Net cash provided from financing activities resulted from receipt of $51.6 million in net proceeds from the sale of common stock in March 2015 and $5.0 million in proceeds from the issuance of convertible notes.

Net cash provided from financing activities was $2.0 million for the year ended December 31, 2014. Net cash provided from financing activities for the year ended December 31, 2014 resulted from proceeds of $2.0 million from the issuance of a convertible note.

Current and Future Financing Needs

We expect to continue to incur significant losses for the foreseeable future, and we expect the losses to increase as we continue the development of, and seek regulatory approvals for, our product candidates and begin to commercialize any approved products. To date, we have not generated any revenues from product sales, and we do not have any approved products. We do not know when, or if, we will generate any revenue from product sales. We do not expect to generate significant revenue from product sales unless and until we obtain regulatory approval of and commercialize one of our current or future product candidates. We are subject to all of the risks incident in the development of new therapeutic products, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. We anticipate that we will need substantial additional funding in connection with our continuing operations.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of stock offerings, debt financings, collaborations, strategic partnerships and licensing arrangements. We do not have any committed external source of funds. Additional capital may not be available on reasonable terms, if at all. To the extent that we raise additional capital through the sale of stock or convertible debt securities, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing, if available, may involve agreements that include increased fixed payment obligations and covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, declaring dividends, selling or licensing intellectual property rights and other

operating restrictions that could adversely impact our ability to conduct our business. If we raise additional funds through collaborations, strategic partnerships or licensing arrangements with third parties, we may have to relinquish valuable rights to our product candidates, including our other technologies, future revenue streams or research programs, or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds when needed, we may be unable to carry out our business plan. As a result we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and commercialize our product candidates even if we would otherwise prefer to develop and commercialize such product candidates ourselves and our business, financial condition and results of operations would be materially adversely affected.

Contractual Obligations and Commitments of Prior Kura

The following table summarizes Prior Kura's contractual obligations and commitments as of December 31, 2014 that will affect our future liquidity:

	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Operating lease obligations(1)	$199,000	$ 111,000	$ 88,000	$—	$ —
Charitable gift	$285,000	$ 95,000	$190,000	$—	$ —
Total	$484,000	$206,000	$278,000	$—	—

(1) In August 2014, Prior Kura entered into a multi-year non-cancelable building sublease for its facility in San Diego, California. The sublease expires in August 2016. In September 2014, Prior Kura entered into a multi-year non-cancelable building lease for office space in Cambridge, Massachusetts. The lease expires in October 2016.

Our commitment for operating leases relates to Prior Kura's leases of office space in San Diego, California and Cambridge, Massachusetts.

We enter into contracts in the normal course of business with CROs and clinical sites for the conduct of clinical trials, CROs for preclinical research studies, professional consultants for expert advice and other vendors for clinical supply manufacturing or other services. These contracts generally provide for termination on notice, and therefore are cancelable contracts and not included in the table of contractual obligations and commitments.

We have in-license and asset purchase agreements under which we are obligated to make payments if and when specified development, regulatory approval and sales threshold milestones are achieved. The milestone payment obligations are not included in the table of contractual obligations and commitments if the amount and timing of such obligations are unknown or uncertain.

On February 15, 2015, we entered into a Sponsored Research Agreement with the University of Michigan under which we will sponsor up to $2.7 million of research at the University of Michigan over a three-year period. We will receive a non-exclusive right to any technology developed under the agreement and have an option right for an exclusive right to any such licenses developed under the agreement. The agreement allows for termination with notice at any time by us. In the event of termination by us prior to the second anniversary of the agreement, other than due to breach by the University of Michigan, we will be required to pay costs budgeted through the second anniversary up to $2.0 million of the sponsored research amount.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements (as defined by applicable regulations of the SEC) that are reasonably likely to have a current or future material effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources.

Other Information

JOBS Act

On April 5, 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. In other words, an "emerging growth company" can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

We are in the process of evaluating the benefits of relying on other exemptions and reduced reporting requirements provided by the JOBS Act. Subject to certain conditions set forth in the JOBS Act, as an "emerging growth company," we intend to rely on certain of these exemptions, including without limitation with respect to, (1) providing an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act and (2) complying with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding a supplement to the auditor's report providing additional information about the audit and the financial statements, known as the auditor discussion and analysis. We will remain an "emerging growth company" until the earliest of (a) the last day of the fiscal year in which we have total annual gross revenues of $1 billion or more, (b) the last day of our fiscal year following the fifth anniversary of the date of the completion of our initial public offering, (c) the date on which we have issued more than $1 billion in non-convertible debt during the previous three years or (d) the date on which we are deemed to be a large accelerated filer (i.e., a seasoned issuer with public float of $700 million or more) under the rules of the SEC.

Recently Adopted Accounting Pronouncements

See "Notes to Financial Statements—Note 3—Recent Accounting Pronouncements" of Prior Kura's financial statements.

Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Risk

Our cash balance as of March 31, 2015 consisted of cash held in an operating account that earns nominal interest income. Therefore, there is no or minimal interest rate risk.

Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Effective at the Effective Time of the Merger, LWBJ, LLP, or LWBJ, was dismissed as the independent registered public accounting firm that audits the financial statements of the Company. Our board of directors approved such dismissal. Effective as of the Effective Time, our board of directors engaged Ernst & Young LLP, as the independent registered public accounting firm to audit the Company's financial statements for the fiscal year ending December 31, 2015.

LWBJ's audit report on the Company's financial statements for the fiscal years ended December 31, 2014 and 2013 did not contain an adverse opinion or a disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope or accounting principles.

During the fiscal years ended December 31, 2014 and 2013 and the subsequent interim period through the date of LWBJ's dismissal, there were no disagreements with LWBJ on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of LWBJ, would have caused it to make reference to the subject matter thereof in connection with its report.

During the fiscal years ended December 31, 2014 and 2013 and the subsequent interim period through the date of LWBJ's dismissal, neither the Company nor anyone acting on its behalf consulted Ernst & Young LLP regarding the application of accounting principles to a specified transaction, either completed or proposed or the type of audit opinion that might be rendered on the Company's financial statements.

The Company has provided LWBJ with a copy of this prospectus prior to the filing of the registration statement of which this prospectus forms a part, and has requested that LWBJ furnish to the Company a letter addressed to the Securities and Exchange Commission stating whether LWBJ agrees with the statements made by the Company in this prospectus. LWBJ has furnished such letter, which letter is filed as Exhibit 16.1 to the registration statement of which this prospectus forms a part, as required by Item 304(a)(3) of Regulation S-K.

DIRECTORS AND EXECUTIVE OFFICERS

The following table sets forth certain information concerning our executive officers and directors as of May 31, 2015:

Name	Age	Position
Executive Officers		
Troy Wilson, Ph.D., J.D.	46	Chairman, President and Chief Executive Officer
Heidi Henson	49	Chief Financial Officer and Secretary
Yi Liu, Ph.D.	47	Chief Scientific Officer
Antonio Gualberto, M.D., Ph.D.	50	Chief Medical Officer
Annette North	49	Senior Vice President, General Counsel
Pingda Ren, Ph.D.	46	Senior Vice President, Chemistry and Pharmaceutical Sciences
Non-Employee Directors		
Faheem Hasnain	56	Director
Robert E. Hoffman	49	Director

Executive Officers

Troy Wilson, Ph.D., J.D. has served as our President and Chief Executive Officer and as the chairman of our board of directors since the Merger in March 2015. Dr. Wilson co-founded Prior Kura in August 2014 and served as the President and Chief Executive Officer of Prior Kura, as well as a member of Prior Kura's board of directors, from August 2014 until the Upstream Merger in March 2015. Dr. Wilson has served as President and Chief Executive Officer of Wellspring Biosciences LLC, a private biopharmaceutical company, and its parent company Araxes Pharma LLC since July 2012 and as President and Chief Executive Officer of Avidity NanoMedicines LLC, a private biopharmaceutical company, since November 2012. Dr. Wilson served as the President and Chief Executive Officer and a member of the board of directors of Intellikine, Inc., a private biopharmaceutical company, from April 2007 to January 2012 and from August 2007 to January 2012, respectively, until its acquisition by Takeda Pharmaceuticals. He has also been a member of the board of directors of Puma Biotechnology, Inc., a public biopharmaceutical company, since October 2013, a member of the board of directors of Zosano Pharma, Inc., a public biopharmaceutical company, since June 2014, and a member of the board of managers of Araxes Pharma LLC, a private biopharmaceutical company, since May 2012, a member of the board of managers of Avidity NanoMedicines LLC since November 2012 and a member of the board of managers of Wellspring Biosciences LLC since May 2012. He holds a J.D. from New York University and graduated with a Ph.D. in bioorganic chemistry and a B.A. in biophysics from the University of California, Berkeley. Our board of directors believes that Dr. Wilson's experience in the pharmaceutical industry and his experience serving in executive roles and on other boards of directors qualify him to serve on our board of directors, including as the chairman.

Heidi Henson has served as our Chief Financial Officer and Secretary since the Merger in March 2015 and served as the Chief Financial Officer and Secretary of Prior Kura from August 2014 until the Upstream Merger in March 2015. Ms. Henson has also served as Chief Financial Officer and Secretary of Wellspring Biosciences LLC, a private biopharmaceutical company, and its parent company Araxes Pharma LLC, since July 2012. From 2007 to March 2012, Ms. Henson served as the Vice President, Finance at Intellikine, Inc., a private biopharmaceutical company, until its acquisition by Takeda Pharmaceuticals. Ms. Henson has served as an independent financial consultant for several years assisting with various start-up activities for early stage companies, SEC reporting and Sarbanes-Oxley implementation and compliance. Ms. Henson previously served as Director of Finance at Anadys Pharmaceuticals, Inc., a public biopharmaceutical company, and held a number of management positions with Fair Isaac & Co., Inc. (formally HNC Software, Inc.), a public software company.

Ms. Henson began her career in auditing at PricewaterhouseCoopers LLP, a public accounting firm, where she served both public and private companies. She received a Bachelor's of Accountancy from the University of San Diego and is a Certified Public Accountant.

Yi Liu, Ph.D. has served as our Chief Scientific Officer since the Merger in March 2015. Dr. Liu co-founded Prior Kura in August 2014 and served as the Chief Scientific Officer of Prior Kura from October 2014 until the Upstream Merger in March 2015. Prior to that, Dr. Liu co-founded and served as Chief Scientific Officer of Wellspring Biosciences LLC, a private biopharmaceutical company, from July 2012 to September 2014. Dr. Liu also co-founded Intellikine, Inc., a private biopharmaceutical company, where he served as Vice President of Drug Discovery from 2007 to May 2012, until its acquisition by Takeda Pharmaceuticals. Prior to Intellikine, Dr. Liu was the head of the drug design group at the Genomics Institute of the Novartis Research Foundation. Earlier in his career, he held senior scientist positions at both SGX Pharmaceuticals, Inc., a public biopharmaceutical company which was acquired by Eli Lilly and Company in 2008, and Curagen Corporation, a public biopharmaceutical development company. Dr. Liu received his Ph.D. in Biochemistry from Princeton University, his MSc in computational chemistry from Beijing University and his BE in Chemical Engineering from Tsinghua University.

Antonio Gualberto, M.D., Ph.D. has served as our Chief Medical Officer since the Merger in March 2015. Dr. Gualberto co-founded Prior Kura in August 2014 and served as the Chief Medical Officer of Prior Kura from October 2014 until the Upstream Merger in March 2015. From June 2012 to September 2014, Dr. Gualberto served as the head of the global clinical development center for oncology at EMD Serono, Inc., the biopharmaceutical subsidiary in the United States of Merck KGaA, Darmstadt, Germany, a global pharmaceutical and chemical group. Prior to this, from September 2010 to April 2012, Dr. Gualberto served as a group head of clinical research for the Takeda Oncology Company, a private biopharmaceutical company. From October 1999 to August 2010 Dr. Gualberto served in varying roles at Pfizer, Inc., a public pharmaceutical company, including Senior Director, Clinical Development and Medical Affairs, and Global Clinical Leader. He has also held several academic positions including, from October 2008 to June 2012, an adjunct appointment of associate professor of pathology and laboratory medicine at The Warren Alpert Medical School of Brown University. Dr. Gualberto received his B.S. from Trinidad College and M.D. and Ph.D. degrees from the University of Seville in Spain. He received postgraduate fellowship training at Case Western Reserve University and the University of North Carolina at Chapel Hill Lineberger Comprehensive Cancer Center.

Annette North has served as our Senior Vice President, General Counsel since the Merger in March 2015 and served as the Senior Vice President, General Counsel of Prior Kura from January 2015 until the Upstream Merger in March 2015. Ms. North also serves as General Counsel and Secretary of Wellspring Biosciences LLC and its parent company Araxes Pharma LLC. Prior to joining us, Ms. North served as Senior Vice President and General Counsel of Ambit Biosciences Corporation, a public biopharmaceutical company, from June 2013 to January 2015, during which time Ambit completed its initial public offering and was acquired by Daiichi Sankyo Company Limited. From January 2009 to December 2014, Ms. North was an independent legal consultant to a number of life sciences companies. From 2000 to 2008, Ms. North served as General Counsel and held a number of other positions at SGX Pharmaceuticals, Inc., a public biopharmaceutical company which was acquired by Eli Lilly and Company in 2008. Earlier in her career, Ms. North served as Senior Director of Operations and Legal at Axys Pharmaceuticals, Inc., a biopharmaceutical company, and Director of Legal Affairs at Sequana Therapeutics, Inc., a biopharmaceutical company. Ms. North received both her Bachelor of Commerce and her Bachelor of Laws from the University of Melbourne, Australia.

Pingda Ren, Ph.D. has served as our Senior Vice President of Chemistry and Pharmaceutical Sciences since the Merger in March 2015. Dr. Ren co-founded Prior Kura in August 2014 and served as the Senior Vice President of Chemistry and Pharmaceutical Sciences of Prior Kura from October 2014 until the Upstream Merger in March 2015. Prior to that, Dr. Ren co-founded and served as Senior Vice President of Chemistry of Wellspring Biosciences LLC, a private biopharmaceutical company, from July 2012 to September 2014. Dr. Ren also co-founded Intellikine, Inc., a private biopharmaceutical company, where he served as Vice President of Chemistry from 2007 to May 2012, until its acquisition by Takeda Pharmaceuticals. Prior to Intellikine, Dr. Ren was a Senior Research

Investigator in Genomics Institute of the Novartis Research Foundation. Earlier in his career, Dr. Ren was a Senior Research Chemist at Albany Molecular Research Inc., a public global contract research and manufacturing organization. Dr. Ren earned his B.A and Ph.D. of Chemistry from Fudan University in China. He completed his postdoctoral research with Professor Huw M. L. Davies at State University of New York at Buffalo.

Non-Employee Directors

Faheem Hasnain has served as a member of our board of directors since April 2015. Mr. Hasnain has served as President, Chief Executive Officer and on the board of directors of Receptos, Inc., a biopharmaceutical company, since November 2010. Prior to that, Mr. Hasnain was the President and Chief Executive Officer and a director of Facet Biotech Corporation, a biology driven antibody company with a focus in multiple sclerosis and oncology. He held that position from December 2008 until the company's acquisition by Abbott Laboratories in April 2010. Previously, Mr. Hasnain was President, Chief Executive Officer and a director of PDL BioPharma, Inc. from October 2008 until Facet Biotech was spun off from PDL BioPharma in December 2008. From October 2004 to September 2008, Mr. Hasnain served at Biogen Inc., a biotechnology company specializing in neurological disorders, autoimmune disorders and cancer, most recently as Executive Vice President in charge of the oncology/rheumatology strategic business unit. Prior to Biogen, Mr. Hasnain held roles with Bristol Myers Squibb, where he was President of the Oncology Therapeutics Network, and for 14 years at GlaxoSmithKline and its predecessor organizations. He has been Chairman of the Board of Sente, Inc. since 2008 and Chairman of the Board of Tocagen Inc. since November 2014. He previously served as a member of the board of directors of Ambit Biosciences Corporation, Seragon Pharmaceuticals, Tercica, Inc., Aragon Pharmaceuticals and Somaxon Pharmaceuticals, Inc. Mr. Hasnain received a B.H.K. and B.Ed. from the University of Windsor Ontario in Canada. Our board of directors believes that Mr. Hasnain's experience in the biopharmaceutical industry and his experience serving in executive roles qualify him to serve on our board of directors.

Robert E. Hoffman has served as a member of our board of directors since March 2015. Mr. Hoffman has served as Senior Vice President, Finance and Chief Financial Officer of Arena Pharmaceuticals, Inc., or Arena, a public biopharmaceutical company, since June 2012. Mr. Hoffman served as the Vice President, Finance and Chief Financial Officer of Arena from August 2011 to June 2012 and previously from December 2005 to March 2011. Mr. Hoffman served as Vice President, Finance and Chief Accounting Officer of Arena from June 2004 to December 2005, as Vice President, Finance of Arena from April 2000 to June 2004, and as Controller of Arena from August 1997 to April 2000. From March 2011 to August 2011, Mr. Hoffman served as Chief Financial Officer for Polaris Group, a biopharmaceutical drug company. Mr. Hoffman is a member of the board of directors of CombiMatrix Corporation, a molecular diagnostics company, and MabVax Therapeutics Holdings, Inc., a biopharmaceutical company. Mr. Hoffman serves as a member of the Financial Accounting Standards Board's Small Business Advisory Committee and the steering committee of the Association of Bioscience Financial Officers. Mr. Hoffman is also a member and a former director and President of the San Diego Chapter of Financial Executives International. Mr. Hoffman holds a B.B.A. from St. Bonaventure University, and is licensed as a C.P.A. (inactive) in the State of California. Our board of directors believes that Mr. Hoffman's experience in the biopharmaceutical industry and his experience serving in executive roles qualify him to serve on our board of directors.

Board Composition and Election of Directors

Terms of Office

Our amended and restated certificate of incorporation and our amended and restated bylaws provide that the authorized number of directors may be changed only by resolution of our board of directors. We currently have authorized three directors. We do not currently have a classified board.

Director Independence

Our securities are not listed on a national securities exchange or on any inter-dealer quotation system which has a requirement that a majority of directors be independent. We evaluate independence, however, by the

standards for director independence set forth in the NASDAQ Marketplace Rules. Under Rules 5605 and 5615 of the NASDAQ Marketplace Rules, a majority of a listed company's board of directors must be comprised of independent directors, subject to certain phase-in exceptions. In addition, NASDAQ Marketplace Rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and governance and nominating committees be independent and that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act. Under Rule 5605(a)(2) of the NASDAQ Marketplace Rules, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Based upon information requested from and provided by each director concerning their background, employment and affiliations, including family relationships, our board of directors has determined that Messrs. Hasnain and Hoffman do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that Messrs. Hasnain and Hoffman are "independent" as that term is defined under Rule 5605(a)(2) of the NASDAQ Marketplace Rules. Dr. Wilson is employed by us and is therefore not independent under NASDAQ Marketplace Rules.

Committees of the Board of Directors

Our board of directors does not currently have an audit committee, a compensation committee or a nominating and governance committee but intends to establish an audit committee, a compensation committee and a nominating and corporate governance committee. Each committee will operate under a charter to be approved by our board of directors.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors and executive officers, and persons who own more than ten percent of a registered class of our equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of our common stock and other equity securities. Officers, directors and greater than ten percent stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file.

To our knowledge, based solely on a review of the copies of such reports furnished to us and written representations regarding the filing of required reports, we believe that all Section 16(a) filing requirements applicable to our directors, executive officers and greater-than-ten-percent beneficial owners with respect to fiscal 2014 were met.

Code of Ethics

We have not yet adopted a code of ethics, which would apply to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Our board of directors plans to adopt a code of ethics.

Board Structure

We have chosen to combine the chief executive officer and chairman of the board of directors positions. We believe that this board of directors leadership structure is the most appropriate for us. Because we are a small company, it is more efficient to have the leadership of the board of directors in the same hands as the chief executive officer. The challenges faced by us at this stage—obtaining financing and implementing our business and marketing plan—are most efficiently dealt with by one person who is familiar with both the operational aspects as well as the strategic aspects of our business.

Board Assessment of Risk

Our board of directors oversees our risk management function. Our management keeps the board of directors apprised of material risks and provides directors access to all information necessary for them to understand and evaluate how these risks interrelate and how management addresses those risks. If the identified risk poses an actual or potential conflict with management, our non-employee directors may conduct the assessment. Currently, the primary risks affecting us are access to financing and the conduct of our clinical trials.

Board Diversity

While we do not have a formal policy on diversity, our board of directors considers diversity to include the skill set, background, reputation, type and length of business experience of our board of directors members, as well as, a particular nominee's contributions to that mix. Our board of directors believes that diversity brings a variety of ideas, judgments and considerations that can benefit our stockholders and us. Although there are many other factors, the board of directors primarily seeks individuals with experience in the design and conduct of clinical trials and other aspects of life science companies.

Indemnification of Directors and Officers

Our amended and restated certificate of incorporation limits our directors' liability to the fullest extent permitted under Delaware corporate law. Delaware corporate law provides that directors of a corporation will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except for liability:

- for any breach of the director's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of the law;
- under Section 174 of the Delaware General Corporation Law for the unlawful payment of dividends; or
- for any transaction from which the director derives an improper personal benefit.

These provisions eliminate our rights and those of our stockholders to recover monetary damages from a director for breach of his fiduciary duty of care as a director except in the situations described above. The limitations summarized above, however, do not affect our ability or that of our stockholders to seek non-monetary remedies, such as an injunction or rescission, against a director for breach of his fiduciary duty.

Section 145 of the Delaware General Corporation Law provides a corporation with the power to indemnify any officer or director acting in his capacity as our representative who is, or is threatened to be, made a party to any lawsuit or other proceeding for expenses, judgment and amounts paid in settlement in connection with such lawsuit or proceeding. The indemnity provisions apply whether the action was instituted by a third party or was filed by one of our stockholders. The Delaware General Corporation Law provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise. We have provided for this indemnification in our amended and restated certificate of incorporation because we believe that it is important to attract qualified directors and officers.

We have entered into indemnification agreements with each of our executive officers and directors that require us to indemnify such persons against any and all expenses, including judgments, fines or penalties, attorney's fees, witness fees or other professional fees and related disbursements and other out-of-pocket costs incurred, in connection with any action, suit, arbitration, alternative dispute resolution mechanism, investigation, inquiry or administrative hearing, whether threatened, pending or completed, to which any such person may be made a party by reason of the fact that such person is or was a director, officer, employee or agent of our company, provided that such director or officer acted in good faith and in a manner that the director or officer

reasonably believed to be in, or not opposed to, our best interests. The indemnification agreements also set forth procedures that will apply in the event of a claim for indemnification thereunder. We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and officers.

Insofar as indemnification by us for liabilities arising under the Securities Act may be permitted to our directors, officers or persons controlling us pursuant to provisions of our amended and restated certificate of incorporation and amended and restated bylaws, or otherwise, we have been advised that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable. In the event that a claim for indemnification by such director, officer or controlling person of us in the successful defense of any action, suit or proceeding is asserted by such director, officer or controlling person in connection with the securities being offered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by us is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue. At the present time, there is no pending litigation or proceeding involving a director, officer, employee or other agent of ours in which indemnification would be required or permitted. We are not aware of any threatened litigation or proceeding, which may result in a claim for such indemnification.

Compensation Committee Interlocks and Insider Participation

We currently do not have a compensation committee. None of our executive officers serves as a member of the board of directors or compensation committee of any other entity that has one or more executive officers serving as a member of our board of directors.

EXECUTIVE COMPENSATION

Our named executive officers for the year ended December 31, 2014 consist solely of our principal executive officer, Troy Wilson, Ph.D., J.D., our President and Chief Executive Officer. None of our other executive officers received total compensation in excess of $100,000 for the year ended December 31, 2014. Unless we specifically indicate otherwise, all share and per share numbers included in this "Executive Compensation" section have been adjusted as necessary to reflect the exchange of shares in the Merger.

Summary Compensation Table

Name and principal position	Year	Salary ($)	Stock awards ($)(2)	All other compensation ($)(3)	Total ($)
Troy Wilson, Ph.D., J.D.(1)					
President and Chief Executive Officer	2014	82,500	3,500	409	86,409

(1) Dr. Wilson served as Prior Kura's President and Chief Executive Officer from August 29, 2014 until the Upstream Merger in March 2015.

(2) In accordance with SEC rules, this column reflects the aggregate fair value of the stock awards granted during 2014 computed as of their respective grant dates in accordance with Financial Accounting Standard Board Accounting Standards Codification Topic 718 for stock-based compensation transactions (ASC 718). Assumptions used in the calculation of these amounts are included in Note 2 to Prior Kura's financial statements appearing elsewhere in this prospectus. These amounts do not reflect the actual economic value that will be realized by the named executive officer upon the vesting of the stock awards or the sale of the common stock underlying such stock awards.

(3) This column reflects amounts paid by us on behalf of the named executive officer pursuant to an executive disability policy. For more information regarding these benefits, see below under "—Perquisites, Health, Welfare and Retirement Benefits."

Annual Base Salary

The base salary of our named executive officers is generally determined and approved at the beginning of each year or, if later, in connection with the commencement of employment of the executive, by our board of directors. The following represents the 2014 annual base salary, which became effective in October 2014, for our named executive officer.

Name	2014 Base Salary ($)
Troy Wilson, Ph.D., J.D.	330,000

Bonus Compensation

From time to time our board of directors may approve bonuses for our named executive officers based on individual performance, company performance or as otherwise determined appropriate.

Pursuant to Dr. Wilson's executive employment agreement, he is eligible for an annual discretionary bonus of up to 40% of his annual base salary based upon our and Dr. Wilson's achievement of objectives and milestones as determined by the board of directors. In 2014, Dr. Wilson did not receive or earn any bonus.

Equity-Based Incentive Awards

Our equity-based incentive awards are designed to align our interests and the interests of our stockholders with those of our employees and consultants, including our named executive officers. The board of directors is responsible for approving equity grants.

We have historically used restricted stock awards as the primary incentive for long-term compensation to our named executive officer. We may grant equity awards at such times as our board of directors determines appropriate. Our executives generally are awarded an initial equity grant in connection with their commencement of employment. Additional grants may occur periodically in order to specifically incentivize executives with respect to achieving certain corporate goals or to reward executives for exceptional performance.

Prior to the Merger, Prior Kura granted all restricted stock awards pursuant to its 2014 Equity Incentive Plan. Such restricted stock awards generally vest over a four-year period and may be subject to acceleration of vesting under certain termination and change of control events. In connection with the Merger, we assumed Prior Kura's 2014 Equity Incentive Plan and concurrently approved the amendment and restatement of Prior Kura's 2014 Equity Incentive Plan, which became effective in April 2015. We will continue to grant equity incentive awards under the terms of the 2014 plan. The terms of our 2014 plan are described below under "Equity Compensation Plan Information—Amended and Restated 2014 Equity Incentive Plan."

On August 29, 2014, the Prior Kura board of directors granted a restricted stock award to Dr. Wilson for 3,500,000 shares of Prior Kura common stock (which number has not been adjusted to reflect the exchange of shares in the Merger), with the shares vesting in equal monthly installments over the following four years, subject to Dr. Wilson's continued service with us. Prior to the Merger, such shares were transferred to three trusts affiliated with Dr. Wilson. In connection with the Exchange, such shares became shares of our common stock.

Agreements with our Named Executive Officers

Below is a written description of our executive employment agreement with our named executive officer, Dr. Wilson. Dr. Wilson's employment is "at will" and may be terminated at any time.

Dr. Wilson. We entered into an executive employment agreement with Dr. Wilson, which was effective as of October 1, 2014, setting forth the terms of his employment as our President and Chief Executive Officer. Pursuant to the agreement, Dr. Wilson is entitled to an initial annual base salary of $330,000 and is eligible for an annual discretionary bonus of up to 40% of his annual base salary based upon our and Dr. Wilson's achievement of objectives and milestones as determined by the board of directors.

Potential Payments upon Termination and Change of Control

Regardless of the manner in which our named executive officer's service terminates, the named executive officer is entitled to receive amounts earned during his term of service, including salary and unused vacation pay.

Dr. Wilson. Pursuant to his executive employment agreement, if we terminate Dr. Wilson's employment without cause or he resigns for good reason (i) more than 59 days before or 12 months after the closing of a corporate transaction, subject to his execution of an effective release and waiver of claims in favor of us, Dr. Wilson will receive a cash lump-sum payment in an amount equal to 12 months of Dr. Wilson's then annual base salary or (ii) within 59 days prior to or within 12 months following the closing of a corporate transaction, subject to his execution of an effective release and waiver of claims in favor of us, Dr. Wilson will receive (1) a cash lump-sum payment in an amount equal to 12 months of Dr. Wilson's then annual base salary; (2) a cash lump-sum payment in an amount equal to Dr. Wilson's full target bonus amount for services to be performed during the year in which the corporate transaction occurs; (3) payment for continued health benefits under COBRA for up to 12 months; and (4) accelerated vesting of all of his outstanding stock awards in full.

For purposes of the agreement described above:

- "cause" generally means with respect to Dr. Wilson, (1) being convicted of or pleading guilty or *nolo contendere* to a felony or any crime involving moral turpitude or dishonesty; (2) participating in a fraud or act of dishonesty against us; (3) materially breaching any agreement with us or any of our written policies, and not curing such breach within five days of our written notice of such breach; (4) engaging in conduct

that demonstrates gross unfitness to serve; or (5) engaging in willful misconduct or refusing to comply with any lawful directive of us, and not curing such noncompliance within five days of our written notice of such noncompliance.

- "good reason" generally means with respect to Dr. Wilson, if any of the following actions are taken by us without Dr. Wilson's written consent: (1) a material reduction in Dr. Wilson's base salary, unless pursuant to a generally applicable salary reduction program; (2) a material reduction in Dr. Wilson's duties (including responsibilities and/or authorities); (3) if applicable, a material reduction in the authority, duties, or responsibilities of the supervisor to whom Dr. Wilson is required to report, including a requirement that the executive report to someone other than our chief executive officer; (4) relocation of Dr. Wilson's principal place of employment to a place that increases his one-way commute by more than 50 miles; or (5) any other action or inaction that constitutes a material breach by us of Dr. Wilson's employment agreement or other service agreement.
- "corporate transaction" generally means the consummation, in a single transaction or is a series of related transactions, of (1) a sale, lease, or other disposition or all or substantially all of our consolidated assets; (2) a merger, consolidation, or similar transaction following which we are not the surviving entity, or (3) a merger, consolidation or similar transaction following which we are the surviving entity but the units outstanding immediately preceding the transaction are converted or exchanged into other property, whether in the form of securities, cash or otherwise.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth certain information regarding equity awards granted to our named executive officer that remain outstanding as of December 31, 2014 (which share and per share numbers have not been adjusted to reflect the exchange of shares in the Merger).

	Stock Awards(1)	
	Number of Shares or Units of Stock that Have Not Vested (#)	Market Value of Shares or Units of Stock that Have Not Vested ($)
Troy Wilson, Ph.D., J.D.	3,208,334(2)	9,079,585(3)

(1) All of the outstanding stock awards were granted under and subject to the terms of the Prior Kura 2014 Equity Incentive Plan which we amended and restated pursuant to our 2014 plan which is described below under "Equity Compensation Plan Information—Amended and Restated 2014 Equity Incentive Plan." All vesting of stock awards is subject to the executive's continuous service with us through the vesting dates and the potential vesting acceleration described above under "—Potential Payments upon Termination and Change of Control."

(2) Represents the unvested portion of a restricted stock award originally granted to Dr. Wilson. The shares vest such that 1/48th of the 3,500,000 shares granted (or 72,916.67 shares) vest on the 29th day of the month, commencing on September 29, 2014 and ending on August 29, 2018. Such shares are currently held in the name of "Red Fish Blue Fish Revocable Trust, dated December 31, 2012," an affiliated trust of Dr. Wilson.

(3) Because our common stock was not traded on a public market on December 31, 2014, the market value has been determined based on a per-share common stock value of $2.83, which was the per share value of our common stock as determined by an independent valuation firm as of December 31, 2014.

Perquisites, Health, Welfare and Retirement Benefits

Our named executive officer is eligible to participate in our employee benefit plans, including our medical, dental, vision, group life, disability and accidental death and dismemberment insurance plans, in each case on the same basis as all of our other employees. We provide a 401(k) plan to our employees, including our current named executive officer, as discussed in the section below entitled "—401(k) Plan."

We generally do not provide perquisites or personal benefits to our named executive officer, except in limited circumstances. We do, however, pay the premiums for term life insurance and disability insurance for all of our employees, including our current named executive officer. In addition, we have an executive disability policy for our executive officers. Our board of directors may elect to adopt qualified or non-qualified benefit plans in the future if it determines that doing so is in our best interests.

401(k) Plan

We maintain a defined contribution employee retirement plan, or 401(k) plan, for our employees. Our named executive officer is eligible to participate in the 401(k) plan on the same basis as our other employees. The 401(k) plan is intended to qualify as a tax-qualified plan under Section 401(k) of the Code. The 401(k) plan provides that each participant may contribute up to the lesser of 100% of his or her compensation or the statutory limit, which is $17,500 for calendar year 2014. Participants that are 50 years or older can also make "catch-up" contributions, which in calendar year 2014 may be up to an additional $5,500 above the statutory limit. We currently do not make matching contributions into the 401(k) plan on behalf of participants. Participant contributions are held and invested, pursuant to the participant's instructions, by the plan's trustee.

Nonqualified Deferred Compensation

We do not maintain nonqualified defined contribution plans or other nonqualified deferred compensation plans. Our board of directors may elect to provide our officers and other employees with non-qualified defined contribution or other nonqualified deferred compensation benefits in the future if it determines that doing so is in our best interests.

Director Compensation

Historically, we have not paid cash or equity compensation to directors for their service on the board of directors. In 2014, we did not have any non-employee directors. We have reimbursed and will continue to reimburse all of our non-employee directors for their travel, lodging and other reasonable expenses incurred in attending meetings of our board of directors.

In March 2015, our board of directors adopted a new compensation policy that will be applicable to all of our non-employee directors. This compensation policy provides that each such non-employee director will receive the following compensation for service on our board of directors:

- an annual cash retainer of $50,000;
- an initial option grant to purchase 30,000 shares of our common stock on the date of each new non-employee director's appointment to our board of directors, vesting annually over a three year period; and
- an annual option grant to purchase 10,000 shares of our common stock on the date of each of our annual stockholder meetings, vesting in full on the one year anniversary of the date of grant.

Each of the initial and annual option grants described above will vest and become exercisable subject to the director's continuous service to us, provided that each option will vest in full upon a change of control (as defined under our 2014 plan). The term of each option will be 10 years, subject to earlier termination as provided in the 2014 plan, except that the post-termination exercise period will be for 12 months from the date of termination, if such termination is other than for cause or due to death or disability. The options will be granted under our 2014 plan, the terms of which are described in more detail below under "Equity Compensation Plan Information—Amended and Restated 2014 Equity Incentive Plan."

EQUITY COMPENSATION PLAN INFORMATION

The following table presents information regarding Prior Kura's equity compensation plans as of December 31, 2014 (such numbers have not been adjusted to reflect the exchange of shares in the Merger). There are no equity compensation plans that have not been approved by Prior Kura's stockholders.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by stockholders:			
2014 Equity Incentive Plan	— (1)	$ —	1,113,000
Equity compensation plans not approved by stockholders:			
None			

(1) Under the Prior Kura 2014 Equity Incentive Plan, Prior Kura granted restricted stock awards covering 9,887,000 shares of its common stock.

Amended and Restated 2014 Equity Incentive Plan

The board of directors and stockholders of Prior Kura approved the Prior Kura 2014 Equity Incentive Plan in August 2014 and we approved the amendment and restatement of the Prior Kura 2014 Equity Incentive Plan pursuant to our 2014 plan, which became effective in April 2015. As of May 31, 2015, there were outstanding restricted stock awards covering 4,943,498 shares that were granted under the Prior Kura 2014 Equity Incentive Plan, outstanding stock options to purchase 410,000 shares that were granted under our 2014 plan and 621,500 shares remaining available for the grant of stock awards under our 2014 plan.

Stock Awards. The 2014 plan provides for the grant of incentive stock options, or ISOs, nonstatutory stock options, or NSOs, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards, and other forms of equity compensation, which we refer to collectively as stock awards, all of which may be granted to employees, including officers, non-employee directors and consultants of us and our affiliates. Additionally, the 2014 plan provides for the grant of performance cash awards. ISOs may be granted only to employees. All other awards may be granted to employees, including officers, and to non-employee directors and consultants.

Share Reserve. Initially, the aggregate number of shares of our common stock that may be issued pursuant to stock awards under the 2014 plan as restated is 5,975,000 shares. Additionally, the number of shares of our common stock reserved for issuance under our 2014 plan will automatically increase on January 1 of each year, beginning on January 1, 2016 and continuing through and including January 1, 2025, by 4% of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors. The maximum number of shares that may be issued upon the exercise of ISOs under our 2014 plan is 12,000,000 shares.

No person may be granted stock awards covering more than 1,000,000 shares of our common stock under our 2014 plan during any calendar year pursuant to stock options, stock appreciation rights and other stock awards whose value is determined by reference to an increase over an exercise or strike price of at least 100% of the fair market value on the date the stock award is granted. Additionally, no person may be granted in a calendar year a performance stock award covering more than 1,000,000 shares or a performance cash award having a maximum value in excess of $1,000,000. Such limitations are designed to help assure that any deductions to which we would otherwise be entitled with respect to such awards will not be subject to the $1,000,000 limitation on the income tax deductibility of compensation paid to any covered executive officer imposed by Section 162(m) of the Code.

If a stock award granted under the 2014 plan expires or otherwise terminates without being exercised in full, or is settled in cash, the shares of our common stock not acquired pursuant to the stock award again will become available for subsequent issuance under the 2014 plan. In addition, the following types of shares under the 2014 plan may become available for the grant of new stock awards under the 2014 plan: (1) shares that are forfeited to or repurchased by us prior to becoming fully vested; (2) shares withheld to satisfy income or employment withholding taxes; or (3) shares used to pay the exercise or purchase price of a stock award. Shares issued under the 2014 plan may be previously unissued shares or reacquired shares bought by us on the open market.

Administration. Our board of directors, or a duly authorized committee thereof, has the authority to administer the 2014 plan. Our board of directors may also delegate to one or more of our officers the authority to (1) designate employees (other than other officers) to be recipients of certain stock awards, and (2) determine the number of shares of common stock to be subject to such stock awards. Subject to the terms of the 2014 plan, our board of directors or the authorized committee, referred to herein as the plan administrator, determines recipients, dates of grant, the numbers and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability and vesting schedule applicable to a stock award. Subject to the limitations set forth below, the plan administrator will also determine the exercise price, strike price or purchase price of awards granted and the types of consideration to be paid for the award. In May 2015, our board of directors established a stock option committee and granted such committee authority to grant stock options under the 2014 plan in accordance with certain guidelines to employees who are not executive officers and are not then subject to Section 16 of the Exchange Act.

The plan administrator has the authority to modify outstanding awards under our 2014 plan. Subject to the terms of our 2014 plan, the plan administrator has the authority to reduce the exercise, purchase or strike price of any outstanding stock award, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Stock Options. ISOs and NSOs are granted pursuant to stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2014 plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2014 plan vest at the rate specified by the plan administrator.

The plan administrator determines the term of stock options granted under the 2014 plan, up to a maximum of 10 years. Unless the terms of an option holder’s stock option agreement provide otherwise, if an option holder’s service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the option holder may generally exercise any vested options for a period of three months following the cessation of service. The option term may be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading policy. If an optionholder’s service relationship with us or any of our affiliates ceases due to disability or death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, options generally terminate immediately upon the termination of the individual for cause. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the optionholder, (4) a net exercise of the option if it is an NSO, and (5) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. An optionholder may designate a beneficiary, however, who may exercise the option following the optionholder’s death.

Tax Limitations On Incentive Stock Options. The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an optionholder during any calendar year under all of our stock plans may not exceed $100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the term of the ISO does not exceed five years from the date of grant.

Restricted Stock Awards. Restricted stock awards are granted pursuant to restricted stock award agreements adopted by the plan administrator. Restricted stock awards may be granted in consideration for (1) cash, check, bank draft or money order, (2) services rendered to us or our affiliates, or (3) any other form of legal consideration. Common stock acquired under a restricted stock award may, but need not, be subject to a share repurchase option in our favor in accordance with a vesting schedule to be determined by the plan administrator. A restricted stock award may be transferred only upon such terms and conditions as set by the plan administrator. Except as otherwise provided in the applicable award agreement, restricted stock that has not vested will be forfeited or repurchased by us upon the participant's cessation of continuous service for any reason.

Restricted Stock Unit Awards. Restricted stock unit awards are granted pursuant to restricted stock unit award agreements adopted by the plan administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Except as otherwise provided in the applicable award agreement, restricted stock units that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

Stock Appreciation Rights. Stock appreciation rights are granted pursuant to stock appreciation grant agreements adopted by the plan administrator. The plan administrator determines the strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Upon the exercise of a stock appreciation right, we will pay the participant an amount equal to the product of (1) the excess of the per share fair market value of our common stock on the date of exercise over the strike price, multiplied by (2) the number of shares of common stock with respect to which the stock appreciation right is exercised. A stock appreciation right granted under the 2014 plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator.

The plan administrator determines the term of stock appreciation rights granted under the 2014 plan, up to a maximum of ten years. Unless the terms of a participant's stock appreciation right agreement provides otherwise, if a participant's service relationship with us or any of our affiliates ceases for any reason other than cause, disability or death, the participant may generally exercise any vested stock appreciation right for a period of three months following the cessation of service. The stock appreciation right term may be further extended in the event that exercise of the stock appreciation right following such a termination of service is prohibited by applicable securities laws. If a participant's service relationship with us, or any of our affiliates, ceases due to disability or death, or a participant dies within a certain period following cessation of service, the participant or a beneficiary may generally exercise any vested stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock appreciation rights generally terminate immediately upon the occurrence of the event giving rise to the termination of the individual for cause. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Performance Awards. The 2014 plan permits the grant of performance-based stock and cash awards that may qualify as performance-based compensation that is not subject to the $1,000,000 limitation on the income tax deductibility of compensation paid to a covered executive officer imposed by Section 162(m) of the Code. To help assure that the compensation attributable to performance-based awards will so qualify, our board of

directors can structure such awards so that stock or cash will be issued or paid pursuant to such award only after the achievement of certain pre-established performance goals during a designated performance period.

The performance goals that may be selected include one or more of the following: (1) earnings (including earnings per share and net earnings); (2) earnings before interest, taxes and depreciation; (3) earnings before interest, taxes, depreciation and amortization; (4) earnings before interest, taxes, depreciation, amortization and legal settlements; (5) earnings before interest, taxes, depreciation, amortization, legal settlements and other income (expense); (6) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense) and stock-based compensation; (7) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense), stock-based compensation and changes in deferred revenue; (8) total stockholder return; (9) return on equity or average stockholders' equity; (10) return on assets, investment, or capital employed; (11) stock price; (12) margin (including gross margin); (13) income (before or after taxes); (14) operating income; (15) operating income after taxes; (16) pre-tax profit; (17) operating cash flow; (18) sales or revenue targets; (19) increases in revenue or product revenue; (20) expenses and cost reduction goals; (21) improvement in or attainment of working capital levels; (22) economic value added (or an equivalent metric); (23) market share; (24) cash flow; (25) cash flow per share; (26) share price performance; (27) debt reduction; (28) stockholders' equity; (29) capital expenditures; (30) debt levels; (31) operating profit or net operating profit; (32) workforce diversity; (33) growth of net income or operating income; (34) billings; (35) bookings; (36) employee retention; (37) initiation of phases of clinical trials and/or studies by specific dates; (38) patient enrollment rates; (39) budget management; (40) submission to, or approval by, a regulatory body (including, but not limited to the FDA) of an applicable filing or a product candidate; (41) implementation or completion of projects or processes (including, without limitation, clinical trial initiation, clinical trial enrollment, clinical trial results, new and supplemental indications for existing products, regulatory filing submissions, regulatory filing acceptances, regulatory or advisory committee interactions, regulatory approvals, and product supply); (42) regulatory milestones; (43) progress of internal research or clinical programs; (44) progress of partnered programs; (45) partner satisfaction; (46) timely completion of clinical trials; (47) submission of INDs and NDAs and other regulatory achievements; (48) research progress, including the development of programs; (49) strategic partnerships or transactions (including in-licensing and out-licensing of intellectual property; and (50) to the extent that an award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by our board of directors.

The performance goals may be based on a company-wide basis, with respect to one or more business units, divisions, affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise (1) in the award agreement at the time the award is granted or (2) in such other document setting forth the performance goals at the time the goals are established, we will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (a) to exclude restructuring and/or other nonrecurring charges; (b) to exclude exchange rate effects; (c) to exclude the effects of changes to generally accepted accounting principles; (d) to exclude the effects of any statutory adjustments to corporate tax rates; (e) to exclude the effects of any "extraordinary items" as determined under generally accepted accounting principles; (f) to exclude the dilutive effects of acquisitions or joint ventures; (g) to assume that any business divested by us achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (h) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (i) to exclude the effects of stock based compensation and the award of bonuses under our bonus plans; (j) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (k) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; (l) to exclude the effect of any other unusual, non-recurring gain or loss or other extraordinary item; and (m) to exclude the effects of the timing of acceptance for review and/or approval of submissions to the FDA or any other regulatory body. In addition, we retain the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of the goals. The performance goals may differ from participant to participant and from award to award.

Other Stock Awards. The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the stock award and all other terms and conditions of such awards.

Changes to Capital Structure. In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (1) the class and maximum number of shares reserved for issuance under the 2014 plan, (2) the class and maximum number of shares by which the share reserve may increase automatically each year, (3) the class and maximum number of shares that may be issued upon the exercise of ISOs, (4) the class and maximum number of shares subject to stock awards that can be granted in a calendar year (as established under the 2014 plan pursuant to Section 162(m) of the Code), (5) the class and maximum number of shares that may be awarded to any non-employees director and (6) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Corporate Transactions. In the event of certain specified significant corporate transactions, the plan administrator has the discretion to take any of the following actions with respect to stock awards:

- arrange for the assumption, continuation or substitution of a stock award by a surviving or acquiring entity or parent company;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;
- accelerate the vesting of the stock award and provide for its termination prior to the effective time of the corporate transaction;
- arrange for the lapse of any reacquisition or repurchase right held by us;
- cancel or arrange for the cancellation of the stock award in exchange for such cash consideration, if any, as our board of directors may deem appropriate; or
- make a payment equal to the excess of (a) the value of the property the participant would have received upon exercise of the stock award over (b) the exercise price otherwise payable in connection with the stock award.

Our plan administrator is not obligated to treat all stock awards, even those that are of the same type, in the same manner.

Under the 2014 plan, a corporate transaction is generally the consummation of (1) a sale or other disposition of all or substantially all of our assets, (2) a sale or other disposition of at least 90% of our outstanding securities, (3) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (4) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

Change of Control. The plan administrator may provide, in an individual award agreement or in any other written agreement between a participant and us that the stock award will be subject to additional acceleration of vesting and exercisability in the event of a change of control. Under the 2014 plan, a change of control is generally (1) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation or similar transaction; (2) a consummated merger, consolidation or similar transaction immediately after which our stockholders cease to own more than 50% of the combined voting power of the surviving entity; (3) a consummated sale, lease or exclusive license or other disposition of all or substantially of our assets; (4) a complete dissolution or liquidation of us, except for a liquidation into a parent corporation, or (5) when a majority of our board of directors becomes comprised of individuals who were not serving on our board of directors on the date of adoption of the 2014 plan, or the incumbent board, or whose nomination, appointment, or election was not approved by a majority of the incumbent board still in office.

Amendment and Termination. Our board of directors has the authority to amend, suspend, or terminate our 2014 plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. No ISOs may be granted after March 6, 2025, which is the tenth anniversary of the date our board of directors amended and restated our 2014 plan.

2015 Employee Stock Purchase Plan

Our board of directors and stockholders adopted the ESPP, which became effective in April 2015. The purpose of the ESPP is to retain the services of new employees and secure the services of new and existing employees while providing incentives for such individuals to exert maximum efforts toward our success and that of our affiliates.

Share Reserve. The ESPP authorizes the issuance of 25,000 shares of our common stock pursuant to purchase rights granted to our employees or to employees of any of our designated affiliates. The number of shares of our common stock reserved for issuance will automatically increase on January 1 of each calendar year, from January 1, 2016 through January 1, 2025 by the lesser of (1) 1% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, (2) 2,000,000 shares, or (3) a number determined by our board of directors that is less than (1) and (2). The ESPP is intended to qualify as an "employee stock purchase plan" within the meaning of Section 423 of the Code. As of the date hereof, no shares of our common stock have been purchased under the ESPP.

Administration. Our board of directors, or a duly authorized committee thereof, has the authority to administer the ESPP. The ESPP is implemented through a series of offerings of purchase rights to eligible employees. Under the ESPP, we may specify offerings with durations of not more than 27 months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for employees participating in the offering. An offering may be terminated under certain circumstances.

Payroll Deductions. Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in the ESPP and may contribute, normally through payroll deductions, up to 15% of their earnings for the purchase of our common stock under the ESPP. Unless otherwise determined by our board of directors, common stock will be purchased for accounts of employees participating in the ESPP at a price per share equal to the lower of (1) 85% of the fair market value of a share of our common stock on the first date of an offering or (2) 85% of the fair market value of a share of our common stock on the date of purchase.

Limitations. Employees may have to satisfy one or more of the following service requirements before participating in the ESPP, as determined by our board of directors: (1) customarily employed for more than 20 hours per week, (2) customarily employed for more than five months per calendar year or (3) continuous employment with us or one of our affiliates for a period of time (not to exceed two years). No employee may purchase shares under the ESPP at a rate in excess of $25,000 worth of our common stock based on the fair market value per share of our common stock at the beginning of an offering for each year such a purchase right is outstanding. Finally, no employee will be eligible for the grant of any purchase rights under the ESPP if immediately after such rights are granted, such employee has voting power over 5% or more of our outstanding capital stock measured by vote or value pursuant to Section 424(d) of the Code.

Changes to Capital Structure. In the event that there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or similar transaction, the board of directors will make appropriate adjustments to (1) the number of shares reserved under the ESPP, (2) the maximum number of shares by which the share reserve may increase automatically each year and (3) the number of shares and purchase price of all outstanding purchase rights.

Corporate Transactions. In the event of certain significant corporate transactions, including the consummation of: (1) a sale of all our assets, (2) the sale or disposition of 90% of our outstanding securities, (3) a merger or consolidation where we do not survive the transaction and (4) a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction, any then-outstanding rights to purchase our stock under the ESPP may be assumed, continued or substituted for by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue or substitute for such purchase rights, then the participants' accumulated payroll contributions will be used to purchase shares of our common stock within ten business days prior to such corporate transaction, and such purchase rights will terminate immediately.

Plan Amendments, Termination. Our board of directors has the authority to amend or terminate our ESPP, provided that except in certain circumstances any such amendment or termination may not materially impair any outstanding purchase rights without the holder's consent. We will obtain stockholder approval of any amendment to our ESPP as required by applicable law or listing requirements.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Since January 1, 2012, we and Prior Kura have engaged in the following transactions with our respective directors, executive officers and holders of more than 5% of voting securities, which we refer to as principal stockholders, and affiliates or immediate family members of our respective directors, executive officers and principal stockholders, other than employment and compensation arrangements, which are described in the section above titled "Executive Compensation." We believe that all of these transactions were on terms as favorable as could have been obtained from unrelated third parties.

As described above, the following executive officers and directors held the following positions at Prior Kura prior to the Merger:

- Troy Wilson, Ph.D., J.D., our President and Chief Executive Officer and chairman of our board of directors, was the President and Chief Executive Officer and a member of the board of directors of Prior Kura prior to the Merger.
- Heidi Henson, our Chief Financial Officer and Secretary, was the Chief Financial Officer and Secretary of Prior Kura prior to the Merger.
- Yi Liu, Ph.D., our Chief Scientific Officer, was the Chief Scientific Officer of Prior Kura prior to the Merger.
- Antonio Gualberto, M.D., Ph.D., our Chief Medical Officer, was the Chief Medical Officer of Prior Kura prior to the Merger.
- Annette North, our Senior Vice President, General Counsel, was the Senior Vice President, General Counsel of Prior Kura prior to the Merger.
- Pingda Ren, Ph.D., our Senior Vice President, Chemistry and Pharmaceutical Sciences, was the Senior Vice President, Chemistry and Pharmaceutical Sciences of Prior Kura prior to the Merger.

Convertible Note Financings

In October 2014, Prior Kura entered into a note purchase agreement with Araxes pursuant to which Prior Kura issued to Araxes a convertible promissory note in aggregate principal amount of $2.0 million, or the October 2014 note. Araxes is affiliated with the following director and executive officers of us and Prior Kura: Troy Wilson, Ph.D., J.D., Heidi Henson, Yi Liu, Ph.D., Antonio Gualberto, M.D., Ph.D., Pingda Ren, Ph.D. and Annette North. The October 2014 note accrued interest at a rate of 8% per annum, compounded annually.

In January 2015, Prior Kura entered into a note purchase agreement with certain investors, including certain executive officers and directors or entities affiliated with such individuals, pursuant to which Prior Kura issued $3.0 million aggregate principal amount of convertible notes, or the January 2015 notes. The January 2015 notes accrued interest at a rate of 8% per annum, compounded annually.

The holders of the January 2015 notes included the following related parties:

Participants	Aggregate Principal Amount of Notes Converted
Directors and Executive Officers	
Troy Wilson, Ph.D., J.D.(1)	$ 75,000
Heidi Henson	$ 35,000
Pingda Ren, Ph.D.	$ 150,000
Antonio Gualberto, M.D., Ph.D.	$ 250,000
Faheem Hasnain	$ 150,000

(1) Dr. Wilson participated through his affiliated family trust, Red Fish Blue Fish Revocable Trust, dated December 31, 2012.

The October 2014 note and the January 2015 notes converted into shares of Prior Kura common stock in connection with the Private Placement discussed in "Common Stock Issued in Private Placement in 2015" below.

Asset Purchase Agreement and Convertible Note

In December 2014, Prior Kura entered into an asset purchase agreement with Araxes. For information about the asset purchase agreement with Araxes, refer to "Description of Our Business—License and Asset Purchase Agreements."

In connection with the asset purchase agreement, Prior Kura issued to Araxes a convertible promissory note in aggregate principal amount of $500,000, or the December 2014 note. The December 2014 note accrued interest at a rate of 8% per annum. The December 2014 note converted into shares of Prior Kura common stock in connection with the Private Placement discussed in "Common Stock Issued in Private Placement in 2015" below.

Common Stock Issued in Private Placement in 2015

The following table summarizes Prior Kura's sales of its common stock on March 6, 2015 in the Private Placement to its executive officers, directors and beneficial owners of more than five percent of its voting securities. The purchase price of $3.16 per share (as adjusted to $6.32 per share after giving effect to the Merger) was the fair market value as determined by arms-length negotiations between sophisticated investors and Prior Kura's management and board of directors. In addition, the aggregate principal amount plus accrued interest of the October 2014 note, the December 2014 note and the January 2015 notes was converted into shares of Prior Kura common stock at the purchase price of $3.16 per share (as adjusted to $6.32 per share after giving effect to the Merger). Prior Kura received no additional consideration from the conversion of the October 2014 note, the December 2014 and the January 2015 notes.

Participants	Purchase Price of Common Stock	Principal Plus Accrued Interest of Convertible Notes Through Date of Conversion(1)	Shares of Common Stock Issued(2)
Greater than 5% stockholders			
Entities affiliated with FMR LLC	$ 11,670,000	$ —	3,693,038(3)
EcoR1 Capital, LLC	$ 9,164,000	$ —	2,900,000(4)
ARCH Venture Fund VIII, L.P.	$ 8,500,002	$ —	2,689,874
Directors and Executive Officers			
Troy Wilson, Ph.D., J.D.	$ —	$ 2,646,364(5)	837,454(6)
Heidi Henson	$ —	$ 35,368	11,192
Pingda Ren, Ph.D.	$ —	$ 151,578	47,966
Antonio Gualberto, M.D., Ph.D.	$ —	$ 252,630	79,946
Robert E. Hoffman	$ 60,002	$ —	18,988
Faheem Hasnain	$ —	$ 151,578	47,966

(1) Per the terms of the convertible promissory notes, with respect to the conversion, interest was calculated through February 28, 2015. Interest accrued after February 28, 2015 was paid in cash.
(2) Does not reflect the adjustment in the number of shares as a result of the Merger.
(3) Includes (a) 3,041,174 shares purchased by Fidelity Select and (b) 651,864 shares purchased by Fidelity Advisor.
(4) Includes (a) 1,836,000 shares purchased by EcoR1 Capital Fund Qualified, L.P. and (b) 1,064,000 shares purchased by EcoR1 Capital Fund, L.P. EcoR1 Capital, LLC, as the sole general partner of EcoR1 Capital Fund, L.P. and EcoR1 Capital Fund Qualified, L.P., may be deemed to beneficially own the shares held of record by EcoR1 Capital Fund, L.P. and EcoR1 Capital Fund Qualified, L.P.

(5) Includes (a) $75,789 from a note owned by Dr. Wilson's affiliated family trust, Red Fish Blue Fish Revocable Trust, dated December 31, 2012 and (b) $2,570,575 from notes owned by Araxes.

(6) Includes (a) 23,982 shares purchased by Dr. Wilson's affiliated family trust, Red Fish Blue Fish Revocable Trust, dated December 31, 2012 and (b) 813,472 shares purchased by Araxes.

At the Effective Time of the Merger, on March 6, 2015, each share of Prior Kura common stock outstanding immediately prior to the Effective Time was exchanged for 0.5 shares of our common stock. The following table summarizes the exchange of the outstanding shares of Prior Kura common stock at the Effective Time by our executive officers, directors and beneficial owners of more than five percent of our voting securities.

Participants	Number of Shares of Prior Kura Common Stock Held Immediately Prior to Exchange	Number of Shares of Our Common Stock Held Immediately Following Exchange
Greater than 5% stockholders		
Entities affiliated with FMR LLC(1)	3,693,038	1,846,519
EcoR1 Capital, LLC(2)	2,900,000	1,450,000
ARCH Venture Fund VIII, L.P.	2,689,874	1,344,937
Directors and Executive Officers		
Troy Wilson, Ph.D., J.D.(3)	4,337,454	2,168,727
Heidi Henson(4)	511,192	255,596
Yi Liu, Ph.D.(5)	1,500,000	749,999
Antonio Gualberto, M.D., Ph.D.	679,946	339,973
Annette North	187,500	93,750
Pingda Ren, Ph.D.(6)	1,547,966	773,982
Robert E. Hoffman	18,988	9,494
Faheem Hasnain	47,966	23,983

(1) Consists of (a) 3,041,174 shares of Prior Kura common stock owned by Fidelity Select, which were exchanged for 1,520,587 shares of our common stock, and (b) 651,864 shares of Prior Kura common stock owned by Fidelity Advisor, which were exchanged for 325,932 shares of our common stock.

(2) Consists of (a) 1,836,000 shares of Prior Kura common stock owned by EcoR1 Capital Fund Qualified, L.P., which were exchanged for 918,000 shares of our common stock, and (b) 1,064,000 shares of Prior Kura common stock owned by EcoR1 Capital Fund, L.P., which were exchanged for 532,000 shares of our common stock. EcoR1 Capital, LLC, as the sole general partner of EcoR1 Capital Fund, L.P. and EcoR1 Capital Fund Qualified, L.P., may be deemed to beneficially own the shares held of record by EcoR1 Capital Fund, L.P. and EcoR1 Capital Fund Qualified, L.P.

(3) Consists of (a) 25,000 shares of Prior Kura common stock owned by the 2013 *If I Ran the Circus* Irrevocable Trust for the benefit of Aidan Eliasson, a trust for the benefit of Dr. Wilson's minor child, which were exchanged for 12,500 shares of our common stock, (b) 25,000 shares of Prior Kura common stock owned by the 2013 *If I Ran the Circus* Irrevocable Trust for the benefit of Ethan Eliasson, a trust for the benefit of Dr. Wilson's minor child, which were exchanged for 12,500 shares of our common stock, (c) 3,473,982 shares of common stock owned by *Red Fish Blue Fish* Revocable Trust, dated December 31, 2012, which were exchanged for 1,736,991 shares of our common stock, and (d) 813,472 shares of common stock owned by Araxes, which were exchanged for 406,736 shares of our common stock. Dr. Wilson is the trustee of *Red Fish Blue Fish* Revocable Trust, dated December 31, 2012 and as such has the dispositive power and control over the securities held by such trust.

(4) Consists of (a) 501,192 shares of common stock owned by Heidi Henson, which were exchanged for 250,596 shares of our common stock, (b) 5,000 shares of common stock owned by Heidi Henson, Custodian for Emily Henson, of which Ms. Henson has dispositive power and control, which were exchanged for 2,500 shares of our common stock and (c) 5,000 shares of common stock owned by Heidi Henson, Custodian for

Joshua Henson, of which Ms. Henson has dispositive power and control, which were exchanged for 2,500 shares of our common stock.

(5) Consists of (a) 1,468,750 shares of common stock owned by Yi Liu, Ph.D., which were exchanged for 734,375 shares of our common stock, (b) 15,625 shares of common stock owned by Yi Liu, Custodian for Max Liu, of which Dr. Liu has dispositive power and control, which were exchanged for 7,812 shares of our common stock, and (c) 15,625 shares of common stock owned by Yi Liu, Custodian for Nicholas Liu, of which Dr. Liu has dispositive power and control, which were exchanged for 7,812 shares of our common stock.

(6) Consists of (a) 1,516,716 shares of common stock owned by Pingda Ren, Ph.D., which were exchanged for 758,358 shares of our common stock, (b) 15,625 shares of common stock owned by Pingda Ren, Custodian for Evan T. Ren, of which Dr. Ren has dispositive power and control, which were exchanged for 7,812 shares of our common stock, and (c) 15,625 shares of common stock owned by Pingda Ren, Custodian for Oliver T. Ren, of which Dr. Ren has dispositive power and control, which were exchanged for 7,812 shares of our common stock.

The Redemption

Immediately following the Effective Time, pursuant to the terms of a Redemption Agreement dated March 6, 2015 by and among us and our then-current stockholders, we completed the closing of a redemption of 5,000,000 shares of our common stock from our then-current stockholders for consideration of $70,000, plus $30,000 in professional costs related to the transaction. The 5,000,000 shares constituted all of the issued and outstanding shares of our capital stock, on a fully-diluted basis, immediately prior to the Merger.

Registration Rights Agreement

At the closing of the Private Placement, Prior Kura entered into a registration rights agreement with the investors in the Private Placement and also the existing stockholders of Prior Kura who agreed to become parties to certain provisions of the agreement or who choose to become parties in the future, which covers substantially all of our outstanding shares of common stock as of May 31, 2015. We assumed the registration rights agreement in connection with the Merger. Pursuant to the registration rights agreement and subject to the rules and regulations of the SEC, we have agreed to file a shelf registration statement covering the resale of the shares of our common stock held by the investors in the Private Placement and the shares of our common stock held by the former stockholders of Prior Kura who are parties to the agreement. We were required to file the shelf registration statement by May 5, 2015, 60 days following the date of the registration rights agreement, which we filed on April 17, 2015. The registration statement of which this prospectus forms a part is the shelf registration statement that we are required to file under the registration rights agreement. In the event fewer than all of our outstanding shares of common stock can be registered pursuant to the so-called Rule 415 doctrine, priority will be given to the shares issued in the Private Placement.

We will be liable to each investor in the Private Placement (but not to the former stockholders of Prior Kura who are parties to the agreement) for liquidated damages, on a 30-day basis, equal to 1.0% of the aggregate purchase price paid by the investor for the registrable shares of our common stock then held by the investor, subject to an overall cap of 5%, (i) if we fail to file the registration statement by May 5, 2015, (ii) if the registration statement is not declared effective by July 4, 2015, 120 days from the date of the registration rights agreement (or by August 3, 2015, 150 days from the date of the registration rights agreement, if the registration statement is reviewed by the SEC), (iii) if we suspend (subject to limited suspension periods described below) or terminate the registration statement prior to the date which is the earlier of (x) the third anniversary of its effectiveness (or the third anniversary of the date on which all registrable shares (subject to certain limitations) are included therein, if later) and (y) the date on which all of the registrable shares cease to be registrable shares, or (iv) in the event one or more suspensions of the effectiveness of the registration statement exceeds 60 days in the aggregate during any 12-month period. We will be permitted to suspend the registration statement up to two times during any 12-month period provided such suspensions do not exceed 30 consecutive days or 60 days in the aggregate in any 12-month period, and a second suspension does not commence sooner than 30 days after the

termination of the first suspension. Any suspension associated with our filing of an annual, periodic or current report, as required by the Exchange Act, will be permitted and will not be counted against the 60 day limitation. Any shares not registered due to the Rule 415 doctrine will not be subject to liquidated damages. Expenses with respect to the filing and effectiveness of such registration statement (but not selling expenses, or underwriter or agent compensation) will be paid by us, including expenses of one counsel for certain of the selling stockholders up to $25,000.

Lock-Up Provisions in Registration Rights Agreement

One of the provisions of the registration rights agreement that is applicable to the former stockholders of Prior Kura who are parties to the agreement, other than the investors in the Private Placement, is a lock-up provision pursuant to which these stockholders agreed, subject to specified exceptions, not to sell, transfer, dispose of, contract to sell, sell any option or contract to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock until the later of (a) 180 calendar days after the date on which our common stock is listed for trading on the New York Stock Exchange, the NYSE-Mkt, or the NASDAQ Stock Market or (b) the date that is twelve (12) months after the closing of the Private Placement (March 6, 2016). These lock-up provisions will not apply to, among other things, shares of common stock acquired in connection with any follow-on securities offerings by us or in open market transactions, or upon the exercise of stock options granted pursuant to our equity incentive plans, so long as the shares acquired upon exercise remain subject to the lock-up provisions in the agreement, or certain gifts and other transfers for estate-planning purposes or by stockholders who are entities to their limited partners, members or stockholders, as specified in the agreement. In the event that a former stockholder of Prior Kura was also an investor in the Private Placement, then these lock-up provisions in the agreement will only apply with respect to the shares held by such stockholder that were not purchased in the Private Placement. Under the registration rights agreement, the investors in the Private Placement agreed, subject to specified exceptions, not to sell, transfer, dispose of, contract to sell, sell any option or contract to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock until the earlier of (a) the date on which our common stock is listed for trading on the OTC Bulletin Boards, OTCQB, OTCQX, the New York Stock Exchange, the NYSE-Mkt, or the NASDAQ Stock Market or (b) 180 calendar days following the date of the closing of the Private Placement. Certain investors in the Private Placement agreed under the Registration Rights Agreement to continue to hold at least 100 shares of our common stock until the date on which our shares are listed for trading on the New York Stock Exchange, the NYSE-Mkt, or the NASDAQ Stock Market.

Indemnification Agreements

We have entered into indemnification agreements with each of our directors and certain of our officers. The indemnification agreements, our amended and restated certificate of incorporation and our amended and restated bylaws require us to indemnify our directors and officers to the fullest extent permitted by Delaware law. See “Directors and Executive Officers—Indemnification of Directors and Officers.”

Indemnity Agreement

As a condition to the Merger, we entered into an Indemnity Agreement with our former officers and directors pursuant to which we agreed to indemnify such former officers and directors for actions taken by them in their official capacities relating to the consideration, approval and consummation of the Merger and certain related transactions.

Sublease Agreement

In August 2014, Prior Kura entered into a sublease agreement with Wellspring Biosciences LLC, or Wellspring, a wholly-owned subsidiary of Araxes, which was amended in December 2014. For information about our sublease with Wellspring, refer to “Description of Our Business—Facilities.”

Services Agreements

In October 2014, Prior Kura entered into a services agreement with Wellspring. Under the services agreement, we pay Wellspring for the provision of various services, including research and development services, an amount equal to the number of full time equivalents, or FTEs, performing the services, at an FTE rate of $400,000, plus actual expenses as reasonably incurred. The agreement has an initial term expiring on December 31, 2015 and renews automatically for additional consecutive one-year periods. The agreement may be terminated by either party with a notice of at least 30 days prior to December 31, 2015 or the expiration of the then-renewal term.

In October 2014, Prior Kura entered into a management services agreement with Araxes, under which Araxes pay us a fixed fee of $100,000 per month for the provision of management services including executive management services, general administrative services, financial and tax related services, development of intellectual property and collaboration services. In addition, the agreement allows for Araxes to pay us an amount equal to the number of FTEs performing collaboration services for Araxes, at an FTE rate of $350,000, plus actual expenses as reasonably incurred. The agreement has an initial term expiring on December 31, 2015 and renews automatically for additional consecutive one-year periods. The agreement may be terminated by either party with a notice of at least 30 days prior to December 31, 2015 or the expiration of the then-renewal term.

Policy for Approval of Related Person Transactions

We do not currently have a policy for the review and approval of related person transactions. We intend to adopt such a policy when we adopt an audit committee charter and establish an audit committee, which we expect will be responsible for reviewing and approving all transactions in which we are a participant and in which any parties related to us, including our executive officers, our directors, beneficial owners of more than 5% of our securities, immediate family members of the foregoing persons and any other persons whom our board of directors determines may be considered related parties under Item 404 of Regulation S-K, has or will have a direct or indirect material interest.

USE OF PROCEEDS

We are filing the registration statement of which this prospectus forms a part to permit holders of the shares of our common stock described in the section entitled “Selling Stockholders” to resell such shares. We will not receive any proceeds from the resale of any shares offered by this prospectus by the selling stockholders.

DIVIDEND POLICY

We have never paid cash dividends on any of our capital stock and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. We do not intend to pay cash dividends to holders of our common stock in the foreseeable future.

DETERMINATION OF OFFERING PRICE

The selling stockholders may only sell their shares of our common stock pursuant to this prospectus at a fixed price of $6.32 per share until such time as our common stock is quoted on the OTCQB or another public trading market for our common stock otherwise develops. At and after such time, the selling stockholders may sell all or a portion of their shares through public or private transactions at prevailing market prices or at privately negotiated prices. The fixed price of $6.32 at which the selling stockholders may sell their shares pursuant to this prospectus was determined based upon the purchase price per share of Prior Kura common stock in the Private Placement, as adjusted for the Exchange of our common stock in the Merger, which was completed on March 6, 2015. We have included a fixed price at which selling stockholders may sell their shares pursuant to this prospectus prior to the time there is a public market for our stock in order to comply with the rules of the SEC that require that, if there is no market for the shares being registered, the registration statement must include a price at which the shares may be sold. All shares being offered pursuant to this prospectus will be sold by existing stockholders without our involvement.

MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

There is not currently, and there has never been, any market for any of our securities. Our securities are not eligible for trading on any national securities exchange and are not quoted for sale on any over-the-counter markets, including the OTCQB.

As of May 31, 2015, we had 14,508,177 outstanding shares of common stock held by 357 holders of record and no outstanding shares of preferred stock.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding beneficial ownership of our common stock as of May 31, 2015 by:

- each person or group who is known by us to beneficially own more than 5% of our common stock;
- each director;
- our named executive officers; and
- all executive officers and directors as a group.

We have determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock that they beneficially own, subject to applicable community property laws.

Applicable percentage ownership is based on 14,508,177 shares of common stock outstanding at May 31, 2015. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed to be outstanding all shares of common stock subject to options, warrants or other convertible securities held by that person or entity that are currently exercisable or will be exercisable on or before July 30, 2015, which is 60 days after May 31, 2015. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person. Except as otherwise noted below, the address for each person or entity is c/o Kura Oncology, Inc., 11119 N. Torrey Pines Road, Suite 125, La Jolla, California 92037.

Beneficial Owner	Title	Shares of Common Stock Beneficially Owned (#)(1)	Percentage of Common Stock Beneficially Owned (%)(1)
Directors and Named Executive Officers			
Troy E. Wilson, Ph.D.(2)	Chairman, President and Chief Executive Officer	2,168,727	14.95%
Faheem Hasnain	Director	23,983	*
Robert E. Hoffman	Director	9,494	*
All current executive officers and directors as a group (8 persons)(3)		4,415,504	30.43%
Other 5% or More Stockholders			
Entities affiliated with FMR LLC(4)		1,846,519	12.73%
EcoR1 Capital, LLC(5)		1,450,000	9.99%
ARCH Venture Fund VIII, L.P.(6)		1,344,937	9.27%
Pingda Ren, Ph.D.(7)		773,982	5.33%
Yi Liu, Ph.D.(8)		749,999	5.17%
Kevan Shokat, Ph.D.(9)		750,000	5.17%

* Represents beneficial ownership of less than 1% of the shares of common stock.

(1) Beneficial ownership is determined in accordance with SEC rules, and includes any shares as to which the stockholder has sole or shared voting power or investment power, and also any shares which the stockholder has the right to acquire within 60 days of May 31, 2015, whether through the exercise or conversion of any stock option, convertible security, warrant or other right. The indication herein that shares are beneficially owned is not an admission on the part of the stockholder that he, she or it is a direct or indirect beneficial owner of those shares.

(2) Consists of (a) 12,500 shares of common stock owned by the 2013 *If I Ran the Circus* Irrevocable Trust for the benefit of Aidan Eliasson, a trust for the benefit of Dr. Wilson's minor child, (b) 12,500 shares of common stock owned by the 2013 *If I Ran the Circus* Irrevocable Trust for the benefit of Ethan Eliasson, a trust for the benefit of Dr. Wilson's minor child, (c) 1,736,991 shares of restricted common stock and common stock owned by *Red Fish Blue Fish* Revocable Trust, dated December 31, 2012, 1,348,959 shares of which are subject to a right of repurchase by us as of July 30, 2015, and (d) 406,736 shares of common stock owned by Araxes. Dr. Wilson is the trustee of *Red Fish Blue Fish* Revocable Trust, dated December 31, 2012 and as such has the dispositive power and control over the securities held by such trust.

(3) Consists of the shares identified in footnotes (2), (7), and (8) and includes 722,796 shares of restricted common stock and common stock owned by three other executive officers and two directors and/or entities affiliated with such executive officers and directors, 498,830 shares of which are subject to a right of repurchase by us as of July 30, 2015.

(4) Consists of (a) 1,520,587 shares of common stock owned by Fidelity Select Portfolios: Biotechnology Portfolio, or Fidelity Select, and (b) 325,932 shares of common stock owned by Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund, or Fidelity Advisor. Fidelity Select has an address at c/o Brown Brothers Harriman & Co, 525 Washington Blvd., Jersey City, NJ 07310 and Fidelity Advisor has an address at c/o State Street Bank & Trust, P.O. Box 5756, Boston, MA 02206.

(5) Consists of (a) 918,000 shares of common stock owned by EcoR1 Capital Fund Qualified, L.P. and (b) 532,000 shares of common stock owned by EcoR1 Capital Fund, L.P. EcoR1 Capital, LLC, as the sole

general partner of EcoR1 Capital Fund, L.P. and EcoR1 Capital Fund Qualified, L.P., may be deemed to beneficially own the shares held of record by EcoR1 Capital Fund, L.P. and EcoR1 Capital Fund Qualified, L.P. EcoR1 Capital, LLC has an address at 409 Illinois Street, San Francisco, CA 94158.

(6) Consists of shares held of record by ARCH Venture Fund VIII, L.P., or ARCH VIII. ARCH Venture Partners VIII, L.P., or the GPLP, as the sole general partner of ARCH VIII, may be deemed to beneficially own certain of the shares held of record by ARCH VIII. The GPLP disclaims beneficial ownership of all shares held of record by ARCH VIII in which the GPLP does not have an actual pecuniary interest. ARCH Venture Partners VIII, LLC, or the GPLLC, as the sole general partner of the GPLP, may be deemed to beneficially own certain of the shares held of record by ARCH VIII. The GPLLC disclaims beneficial ownership of all shares held of record by ARCH VIII in which it does not have an actual pecuniary interest. Keith Crandell, Clinton Bybee and Robert Nelsen are the managing directors of the GPLLC, and may be deemed to beneficially own certain of the shares held of record by ARCH VIII. The managing directors disclaim beneficial ownership of all shares held of record by ARCH VIII in which they do not have an actual pecuniary interest. ARCH Venture Fund VIII, L.P. has an address at 8725 West Higgins Road, Suite 290, Chicago, IL 60631.

(7) Consists of (a) 734,375 shares of restricted common stock owned by Pingda Ren, Ph.D., 578,125 shares of which are subject to a right of repurchase by us as of July 30, 2015, (b) 23,983 shares of common stock owned by Pingda Ren, Ph.D., (c) 7,812 shares of common stock owned by Pingda Ren, Custodian for Evan T. Ren, of which Dr. Ren has dispositive power and control, and (d) 7,812 shares of common stock owned by Pingda Ren, Custodian for Oliver T. Ren, of which Dr. Ren has dispositive power and control.

(8) Consists of (a) 734,375 shares of restricted common stock owned by Yi Liu, Ph.D., 578,125 shares of which are subject to a right of repurchase by us as of July 30, 2015, (b) 7,812 shares of common stock owned by Yi Liu, Custodian for Max Liu, of which Dr. Liu has dispositive power and control, and (c) 7,812 shares of common stock owned by Yi Liu, Custodian for Nicholas Liu, of which Dr. Liu has dispositive power and control.

(9) Consists of 750,000 shares of restricted common stock owned by Kevan Shokat, 578,125 shares of which are subject to a right of repurchase by us as of July 30, 2015.

SELLING STOCKHOLDERS

This prospectus covers the resale by the selling stockholders identified below of 14,279,820 shares of our common stock. The selling stockholders acquired our securities pursuant to the Exchange in the Merger. None of our selling stockholders received any of our securities as compensation for underwriting services. We will not receive any proceeds from the resale of the common stock by the selling stockholders.

Except as disclosed in the footnotes below, none of the selling stockholders has been an officer or director of ours or any of our predecessors or affiliates within the past three years. Except as disclosed in the footnotes below, no selling stockholder had a material relationship with the company or any of its affiliates within the last three years.

The following table and the accompanying footnotes are based in part on information supplied to us by the selling stockholders. The table and footnotes assume that the selling stockholders will sell all of the shares listed. However, because the selling stockholders may sell all or some of their shares under this prospectus from time to time, or in another permitted manner, we cannot assure you as to the actual number of shares that will be sold by the selling stockholders or that will be held by the selling stockholders after completion of any sales. We do not know how long the selling stockholders will hold the shares before selling them.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our common stock. Shares of our common stock subject to options or warrants that are currently exercisable or exercisable within 60 days of May 31, 2015 are considered outstanding and beneficially owned by the person holding the options or warrants for the purpose of calculating the percentage ownership of that person but not for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted in the footnotes below, we believe the persons and entities in this table have sole voting and investing power with respect to all of the shares of our common stock beneficially owned by them, subject to community property laws, where applicable. The inclusion of any shares in this table does not constitute an admission of beneficial ownership by the persons named below. The beneficial owners listed below are sorted alphabetically by first name.

	Shares Beneficially Owned Before the Offering		Shares Being Offered	Shares Beneficially Owned After the Offering	
Name of Beneficial Owner	(#)	(%)(1)	(#)	(#)(1)(2)	(%)(1)(2)
A. Demby	7,912	*	7,912	—	*
A. Van Breene	1,600	*	1,600	—	*
Aaron Gathmann	1,600	*	1,600	—	*
Abbot A. Thayer	2,000	*	2,000	—	*
Afroditi Kontos	2,500	*	2,500	—	*
Alan M. Mindel	1,600	*	1,600	—	*
Alan Young	5,000	*	5,000	—	*
Albert B. Erwin, Jr.	3,125	*	3,125	—	*
Allen O. Cage Jr. & Jolaine Cage	3,125	*	3,125	—	*
Allenstown Investment Partners	2,500	*	2,500	—	*
Amy Habie	2,000	*	2,000	—	*
Andrew & Gloria Wahl	2,000	*	2,000	—	*
Andrew S. Rosen	3,037	*	3,037	—	*
Annette North(3)	93,750	*	93,750	—	*
Anthony Behette	5,000	*	5,000	—	*
Anthony D. Johnson	3,150	*	3,150	—	*
Anthony M. Insogna	3,997	*	3,997	—	*
Antonio Gualberto(4)	339,973	2.34%	339,973	—	*
Araxes Pharma LLC	406,736	2.80%	406,736	—	*
ARCH Venture Fund VIII, L.P.(5)	1,344,937	9.27%	1,344,937	—	*

Name of Beneficial Owner	Shares Beneficially Owned Before the Offering (#)	(%)(1)	Shares Being Offered (#)	Shares Beneficially Owned After the Offering (#)(1)(2)	(%)(1)(2)
Arhontoula Kontos	2,500	*	2,500	—	*
Arthur Levin for Butler-Levin Revocable Trust	7,994	*	7,994	—	*
Balantis Kontos	3,000	*	3,000	—	*
Barry Frost	3,125	*	3,125	—	*
Bishop Family Properties, L.P.	5,000	*	5,000	—	*
Bobby Thrash	2,500	*	2,500	—	*
Boxer Capital, LLC	569,620	3.93%	569,620	—	*
Brian E. Rabune	2,500	*	2,500	—	*
Britton Joint Revocable Trust	1,600	*	1,600	—	*
Carlo Alberici	3,950	*	3,950	—	*
Charles Johnston	2,400	*	2,400	—	*
Charles Scholpp	2,250	*	2,250	—	*
Christofi Kontos	2,500	*	2,500	—	*
Christopher Fish	1,600	*	1,600	—	*
Christopher Justin Kirk	7,994	*	7,994	—	*
Clough Investment Partners I, L.P.	316,004	2.18%	316,004	—	*
Clough Investment Partners II, L.P.	15,950	*	15,950	—	*
Clough Offshore Fund (QP), Ltd.	30,880	*	30,880	—	*
Clough Offshore Fund, Ltd.	111,850	*	111,850	—	*
Constance Kontos	2,500	*	2,500	—	*
Craig & Lisa Fishman	3,125	*	3,125	—	*
D. Frank Davis	3,000	*	3,000	—	*
Dale Carlson	3,125	*	3,125	—	*
Dan Ryan	15,989	*	15,989	—	*
Daniel R. Monks	4,000	*	4,000	—	*
Daryl R. Schaller	2,500	*	2,500	—	*
David A. Diehl	2,400	*	2,400	—	*
David A. Miratsky	3,125	*	3,125	—	*
David Boies	2,000	*	2,000	—	*
David C. Bukzin	3,125	*	3,125	—	*
David Fyfe	2,750	*	2,750	—	*
David M. Morse	1,600	*	1,600	—	*
David Quinby	2,750	*	2,750	—	*
David Silverman	2,500	*	2,500	—	*
David Stangis	2,000	*	2,000	—	*
Demby Family LP	10,285	*	10,285	—	*
Dennis Howarter & Pamela Howarter	3,950	*	3,950	—	*
Diamond B Capital Trust	2,000	*	2,000	—	*
Donald Cameron	3,950	*	3,950	—	*
Donald Ingber	1,582	*	1,582	—	*
Donald P. Favre	5,000	*	5,000	—	*
Douglas Baker	2,750	*	2,750	—	*
Douglas Fambrough	3,500	*	3,500	—	*
Douglas Grant	3,125	*	3,125	—	*
Doverhill Partners LLC	7,374	*	7,374	—	*
Dr. Joseph A. Penner	2,500	*	2,500	—	*
Duane Corcoran	2,500	*	2,500	—	*
Duane Renfro	2,500	*	2,500	—	*
Duncan J. Milcetic	4,000	*	4,000	—	*

Name of Beneficial Owner	Shares Beneficially Owned Before the Offering (#)	(%)(1)	Shares Being Offered (#)	Shares Beneficially Owned After the Offering (#)(1)(2)	(%)(1)(2)
Duvall Enterprises	3,125	*	3,125	—	*
Dwight Raymond Lemoine	3,125	*	3,125	—	*
EcoR1 Capital Fund Qualified, L.P.	918,000	6.33%	918,000	—	*
EcoR1 Capital Fund, L.P.	532,000	3.67%	532,000	—	*
Edward J. Quirk, Trustee of the Edward J. and Maria E. Quirk Revocable Trust	15,989	*	15,989	—	*
Edward Kansa	3,125	*	3,125	—	*
Edward Lopez	3,125	*	3,125	—	*
Edward M. Cupoli & Sharon L. Cupoli	1,600	*	1,600	—	*
Edward Wavak	3,125	*	3,125	—	*
Edward Wiles	3,164	*	3,164	—	*
Edwin Jordan	3,125	*	3,125	—	*
Eleven II Partners Ltd.	1,600	*	1,600	—	*
Elissa G. Wernick	1,600	*	1,600	—	*
Ellis R. Guilbeau	5,000	*	5,000	—	*
Emilio DiMatteo	5,000	*	5,000	—	*
Eugene & Maryann Lucadamo	1,600	*	1,600	—	*
Eugene J. Tonkovich	3,125	*	3,125	—	*
Faheem Hasnain	23,983	*	23,983	—	*
Farshad & Ann Lalehzarian	5,000	*	5,000	—	*
Farzahn Kamali	23,734	*	23,734	—	*
Fern P. O'Brian	1,600	*	1,600	—	*
Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund	325,932	2.25%	325,932	—	*
Fidelity Select Portfolios: Biotechnology Portfolio	1,520,587	10.48%	1,520,587	—	*
First Ambergris Trust	2,000	*	2,000	—	*
Florence Kaufman	5,000	*	5,000	—	*
Fontini Kontos	2,500	*	2,500	—	*
Frank McCormick	23,489	*	23,489	—	*
Franklin M. Berger, CFA	197,785	1.36%	197,785	—	*
Gang Xu	15,989	*	15,989	—	*
Gary Johnson	3,125	*	3,125	—	*
Gary L. Sturm	3,125	*	3,125	—	*
Gary W. Carlisle	3,125	*	3,125	—	*
Ge Li	31,978	*	31,978	—	*
George & Mihalia Kontos	2,500	*	2,500	—	*
George R. Martin	3,125	*	3,125	—	*
Gerald A. Tomsic Retirement Trust	2,500	*	2,500	—	*
Gerald C. Goldman	3,150	*	3,150	—	*
Gerald Tomsic 1995 Trust	2,500	*	2,500	—	*
Gerard Fragetti	1,600	*	1,600	—	*
Gerry Elman	1,600	*	1,600	—	*
Gilbert Omenn	2,000	*	2,000	—	*
Glen Robert Daugherty Trust, Dated 12-27-2002	6,395	*	6,395	—	*
Glendenning Investment Group	3,125	*	3,125	—	*
Glenn Darrah	2,500	*	2,500	—	*
Glenn Fleischhacker	4,775	*	4,775	—	*

Name of Beneficial Owner	Shares Beneficially Owned Before the Offering (#)	(%)(1)	Shares Being Offered (#)	Shares Beneficially Owned After the Offering (#)(1)(2)	(%)(1)(2)
Gloria C. Wahl	2,000	*	2,000	—	*
Gordon Lassar	5,000	*	5,000	—	*
Goro Takeda	31,978	*	31,978	—	*
Grant's Engineering & Machine Company	3,125	*	3,125	—	*
Greg Schmergel	2,400	*	2,400	—	*
Greg Sheldon	3,125	*	3,125	—	*
Gregory T. & Mary Jo Schiffman	2,750	*	2,750	—	*
Harold O. LaFlash & Greta G. LaFlash Revocable Trust	2,750	*	2,750	—	*
Harry Neff	2,500	*	2,500	—	*
Heidi Henson(6)	250,596	1.73%	250,596	—	*
Heidi Henson, Custodian for Emily Henson(6)	2,500	*	2,500	—	*
Heidi Henson, Custodian for Joshua Henson(6)	2,500	*	2,500	—	*
Howard E. Sneed	3,125	*	3,125	—	*
Howard K. Fuguet	5,000	*	5,000	—	*
If I Ran the Circus Irrevocable Trust for the benefit of Aidan Eliasson(7)	12,500	*	12,500	—	*
If I Ran the Circus Irrevocable Trust for the benefit of Ethan Eliasson(8)	12,500	*	12,500	—	*
J & C Resources, LLC	2,500	*	2,500	—	*
J. Michael Bowman	2,400	*	2,400	—	*
J.B. Woodward Company, LLC	1,600	*	1,600	—	*
Jack Chitayat	2,500	*	2,500	—	*
James D. Goodman	1,582	*	1,582	—	*
James E. Harris	1,941	*	1,941	—	*
James K. Johnson	2,800	*	2,800	—	*
James R. Aldridge	3,050	*	3,050	—	*
James S. Murday	2,500	*	2,500	—	*
James Shaine Richman	1,600	*	1,600	—	*
James T. & Jana D. Grinnan	3,125	*	3,125	—	*
James Terranova	9,494	*	9,494	—	*
Jan T. Vreeland	3,125	*	3,125	—	*
Jaye Venuti & Michael Yokoyama DDS P.D.C. Defined Benefit Plan	2,500	*	2,500	—	*
Jaye Venuti & Michael Yokoyama Family Trust	2,500	*	2,500	—	*
Jeff Davidson	2,000	*	2,000	—	*
Jeff Wilmes	3,150	*	3,150	—	*
Jeffrey B. Gray	2,500	*	2,500	—	*
Jeffrey Benison	2,000	*	2,000	—	*
Jeffrey L. Hilbert	1,600	*	1,600	—	*
Jeffrey Miller	3,125	*	3,125	—	*
Jerry Stockton	2,500	*	2,500	—	*
Jill & Chris Manning	2,800	*	2,800	—	*
Joe C. Drumheller	3,125	*	3,125	—	*
Joel Marcus	15,989	*	15,989	—	*
John Brad Carlin	3,125	*	3,125	—	*
John E. Bishop	2,500	*	2,500	—	*
John Fred Riley	1,600	*	1,600	—	*
John Morel	1,600	*	1,600	—	*
John Morrow	3,125	*	3,125	—	*

Name of Beneficial Owner	Shares Beneficially Owned Before the Offering (#)	(%)(1)	Shares Being Offered (#)	Shares Beneficially Owned After the Offering (#)(1)(2)	(%)(1)(2)
John R. Bartos	3,125	*	3,125	—	*
John Sand & Linda McPhee	3,125	*	3,125	—	*
Johnson & Johnson Innovation—JJDC, Inc.	159,615	1.10%	159,615	—	*
Jolanta Grembecka	37,500	*	37,500	—	*
Jon K. Peterson	3,125	*	3,125	—	*
Jonathan A. Kabakoff	3,997	*	3,997	—	*
Jonathan C. Guest	1,600	*	1,600	—	*
Jonathan T. McClure	3,125	*	3,125	—	*
Jorge Morazzani	1,600	*	1,600	—	*
Jose A. Olivares	1,600	*	1,600	—	*
Joseph & Jennifer Garone	2,750	*	2,750	—	*
Joseph A. Grzyb	2,000	*	2,000	—	*
Joseph Berkowitz	1,600	*	1,600	—	*
Joseph H. McCall	3,000	*	3,000	—	*
Joseph LoBuono	2,850	*	2,850	—	*
Joseph P. Slattery	3,125	*	3,125	—	*
Joseph Perry	1,600	*	1,600	—	*
Josephine G. Thayer	2,000	*	2,000	—	*
Juan Liu	15,989	*	15,989	—	*
Kara Mindel	1,600	*	1,600	—	*
Karl A. Seck	1,600	*	1,600	—	*
Karl David Handelsman	79,946	*	79,946	—	*
Katharine Marcell Haxen Revocable Living Trust	3,125	*	3,125	—	*
Keith Manchester	15,823	*	15,823	—	*
Keith O. Newton	3,162	*	3,162	—	*
Keith R. Collins	2,500	*	2,500	—	*
Kenneth J. Hite & Constance Cservenyak Rev Living Trust	1,600	*	1,600	—	*
Kevan Shokat	750,000	5.17%	750,000	—	*
Kevin C. McDonough	2,800	*	2,800	—	*
Kevin M. Borkowski	1,725	*	1,725	—	*
Kyahn Kamali	1,582	*	1,582	—	*
Larry Gelbfish	3,125	*	3,125	—	*
Lawrence Goodman	1,600	*	1,600	—	*
Lea Bone	2,000	*	2,000	—	*
Leerink Holdings LLC	79,426	*	79,426	—	*
Leerink Swann Co-Investment Fund, LLC	79,426	*	79,426	—	*
Leon Radomsky	2,250	*	2,250	—	*
Lewis M. Edelstein Trust U/A 4/12/07	3,125	*	3,125	—	*
Linda Crossman	2,000	*	2,000	—	*
LOA Investments, LLC	15,989	*	15,989	—	*
Louise G. Seck	1,600	*	1,600	—	*
Luigi Mancini, Sr.	5,000	*	5,000	—	*
Luke Pallante	2,500	*	2,500	—	*
Madeline Behette	5,000	*	5,000	—	*
Maik Kontos	2,500	*	2,500	—	*
Mandell Gross Family Trust U/A 12/1/1993	2,500	*	2,500	—	*
Manzoor Hasan	3,125	*	3,125	—	*

Name of Beneficial Owner	Shares Beneficially Owned Before the Offering (#)	(%)(1)	Shares Being Offered (#)	Shares Beneficially Owned After the Offering (#)(1)(2)	(%)(1)(2)
Marc Cohen	5,000	*	5,000	—	*
Marc E. Jaffe	1,600	*	1,600	—	*
Marguerite Behette-Hart	5,000	*	5,000	—	*
Mario R. Dell'Aera, Jr.	4,052	*	4,052	—	*
Mark A. & Arthur Koerner	4,000	*	4,000	—	*
Mark Cook	3,150	*	3,150	—	*
Mark Nicholas Tompkins	5,058	*	5,058	—	*
Mark T. Dungan	1,582	*	1,582	—	*
Mark W. Croll & Joni S. Croll	2,000	*	2,000	—	*
Marlene Mindel	3,000	*	3,000	—	*
Marvin Mermelstein	3,125	*	3,125	—	*
Mary Ann Bosanac & Edward Bosanac	3,956	*	3,956	—	*
Mary Osbakken	2,250	*	2,250	—	*
Masthead 2DL2C Lic 401K Trust	2,000	*	2,000	—	*
Matthew E. Ross	1,600	*	1,600	—	*
Matthew Morgan Bogust	1,582	*	1,582	—	*
Matthew Strobeck	79,114	*	79,114	—	*
May W. Jaffe	1,600	*	1,600	—	*
MCK Corporation	2,850	*	2,850	—	*
Michael Barnett Saft	2,500	*	2,500	—	*
Michael Blechman	2,500	*	2,500	—	*
Michael D & Darlene Stewart Creasman	3,125	*	3,125	—	*
Michael Ingardia	3,125	*	3,125	—	*
Michael J. & Jane M. Sullivan	2,000	*	2,000	—	*
Michael J. Danaher & Carol Lee Danaher TTEES The Danaher Family Trust	1,600	*	1,600	—	*
Michael Kontos	2,500	*	2,500	—	*
Michael P. Quackenbush	1,600	*	1,600	—	*
Michael Snow	3,162	*	3,162	—	*
Michael Stefanovich	2,500	*	2,500	—	*
Michael T. Smith & Jane E. Smith	2,500	*	2,500	—	*
Mike Trout	2,500	*	2,500	—	*
Mohammed S. Rais	1,600	*	1,600	—	*
Mossrock Capital, LLC	39,557	*	39,557	—	*
MSB Family Trust	2,500	*	2,500	—	*
MVA Investors, LLC	63,291	*	63,291	—	*
Nancy Dubin	19,778	*	19,778	—	*
Navy Bancorp, Inc. (Philip Emmons)	5,000	*	5,000	—	*
Neal Rosen	12,500	*	12,500	—	*
Neil B. Goldstein	2,000	*	2,000	—	*
Neil M. Kaufman	1,600	*	1,600	—	*
Nextech IV Oncology S.C.S. SICAV-SIF	553,796	3.82%	553,796	—	*
Nicholas S. Cucinelli	1,600	*	1,600	—	*
Nima Shokat	3,956	*	3,956	—	*
Norman Goldberg	2,500	*	2,500	—	*
Orville Chambers	3,125	*	3,125	—	*
Osage University Partners II, LP	474,684	3.27%	474,684	—	*
P. Kent Hawryluk Revocable Trust	31,978	*	31,978	—	*

Name of Beneficial Owner	Shares Beneficially Owned Before the Offering (#)	(%)(1)	Shares Being Offered (#)	Shares Beneficially Owned After the Offering (#)(1)(2)	(%)(1)(2)
Paul C. Sarahan	2,250	*	2,250	—	*
Paul F. Berlin	5,000	*	5,000	—	*
Perry Jacobson	3,125	*	3,125	—	*
Peter A. Casey	1,582	*	1,582	—	*
Peter Stewart	1,600	*	1,600	—	*
PFM Healthcare Opportunities Master Fund, L.P.	283,620	1.95%	283,620	—	*
PFM Healthcare Principals Fund, L.P.	32,836	*	32,836	—	*
Philip Herbert Lippel	1,750	*	1,750	—	*
Philip M. Arlen	2,676	*	2,676	—	*
Pingda Ren(9)	758,358	5.23%	758,358	—	*
Pingda Ren, Custodian for Evan T. Ren(9)	7,812	*	7,812	—	*
Pingda Ren, Custodian for Oliver T. Ren(9)	7,812	*	7,812	—	*
Raj D. Pendse	3,125	*	3,125	—	*
Ralph Glasgal	2,500	*	2,500	—	*
Randolph C. Metcalfe Living Trust	3,050	*	3,050	—	*
Raymond Yarusi	2,500	*	2,500	—	*
RE Monks Construction Company, LLC	2,500	*	2,500	—	*
Red Fish Blue Fish Revocable Trust, dated December 31, 2012(10)	1,736,991	11.97%	1,736,991	—	*
Regents of the University of Michigan	53,006	*	53,006	—	*
Reyad Fezzani	1,600	*	1,600	—	*
Richard A. Heyman and Anne E. Daigle Trust	23,983	*	23,983	—	*
Richard L. Sullivan	1,600	*	1,600	—	*
Richard Melnick	3,125	*	3,125	—	*
Richard Melnick C/F Jackson Melnick	2,500	*	2,500	—	*
Richard Mulkerrins	3,125	*	3,125	—	*
Rio Vista II	2,000	*	2,000	—	*
Rio Vista III	2,000	*	2,000	—	*
Rio Vista Trust	2,000	*	2,000	—	*
Rio Vista Trust IV	2,000	*	2,000	—	*
Robert A. Melnick	1,750	*	1,750	—	*
Robert C. Lannert Trust U/A 5/1/98	3,125	*	3,125	—	*
Robert Hoffman(11)	9,494	*	9,494	—	*
Robert Kaufman	5,000	*	5,000	—	*
Robert T. Geras	2,000	*	2,000	—	*
Roger Joseph Schwarz	5,000	*	5,000	—	*
Roger S. Ballentine	1,600	*	1,600	—	*
Ronald Hanson	3,175	*	3,175	—	*
Ronald J. Ciasulli	3,450	*	3,450	—	*
Rong Zheng	3,125	*	3,125	—	*
Ruth Shokat	3,956	*	3,956	—	*
Salvatore & Jacqueline Butera	1,582	*	1,582	—	*
Sandra Rubin	5,000	*	5,000	—	*
Sharad & Chandrikda Patel	2,500	*	2,500	—	*
Sharon Cupoli	1,600	*	1,600	—	*
Shelly O'Neill	2,375	*	2,375	—	*
Shore Harbor LLC	2,500	*	2,500	—	*
Shreefal Mehta	1,600	*	1,600	—	*
Skyline, LLLP	31,978	*	31,978	—	*

Name of Beneficial Owner	Shares Beneficially Owned Before the Offering (#)	(%)(1)	Shares Being Offered (#)	Shares Beneficially Owned After the Offering (#)(1)(2)	(%)(1)(2)
Sonny Davis	2,500	*	2,500	—	*
Stephen Gardner	3,125	*	3,125	—	*
Steve and Michael Kontos	5,000	*	5,000	—	*
Steve Kontos	5,000	*	5,000	—	*
Steven K. Nelson & Deborah S. Nelson	3,000	*	3,000	—	*
Steven Zales	1,600	*	1,600	—	*
Stuart Martin Seldowitz	1,600	*	1,600	—	*
Stuart Simpson	3,164	*	3,164	—	*
Suleman Sayani	3,125	*	3,125	—	*
Sunil Talati	1,582	*	1,582	—	*
Tami Goodman	1,600	*	1,600	—	*
Tanju & Tina S. Obut	4,000	*	4,000	—	*
Tech Plan (William A. Moore)	3,125	*	3,125	—	*
Terry Lynne	3,125	*	3,125	—	*
The Bahr Family Limited Partnership	5,000	*	5,000	—	*
The Henry H. Bahr Q-Tip Trust	2,500	*	2,500	—	*
The Spencer A. and Susan L. Joyner Joint Revocable Trust	3,125	*	3,125	—	*
Theodore Joseph McCarty	2,500	*	2,500	—	*
Theta Capital, LLC	2,500	*	2,500	—	*
Thomas & Joy Licata	2,500	*	2,500	—	*
Thomas D. Paul	3,000	*	3,000	—	*
Thomas Mayberry	3,125	*	3,125	—	*
Thomas O'Brien	2,500	*	2,500	—	*
Todd F. Miller & Kennerly C. Miller	1,600	*	1,600	—	*
Todd G. Bari	3,162	*	3,162	—	*
Todd J. Anderson	1,600	*	1,600	—	*
Tom Dougherty	1,582	*	1,582	—	*
Tomasz Cierpicki	37,500	*	37,500	—	*
Tommy C. Shiao	5,000	*	5,000	—	*
Trevor Castor	2,400	*	2,400	—	*
Vadim Garbar	2,500	*	2,500	—	*
Valerie Lens	2,500	*	2,500	—	*
Vernon Simpson	2,500	*	2,500	—	*
Vincent Latour	4,000	*	4,000	—	*
Walter Cremin	2,500	*	2,500	—	*
Wayne Fleischhacker	5,000	*	5,000	—	*
Wayne K. Baldin	3,125	*	3,125	—	*
Wei Tong Ma	3,125	*	3,125	—	*
William Crossman	2,000	*	2,000	—	*
William F. Griffin, Jr.	2,000	*	2,000	—	*
William H. Golove	1,600	*	1,600	—	*
William Richard Dougherty	3,125	*	3,125	—	*
William Scott Smith	1,600	*	1,600	—	*
Wing Real Estate, LLC	4,000	*	4,000	—	*
Yi Liu(12)	734,375	5.06%	734,375	—	*
Yi Liu, Custodian for Max Liu(12)	7,812	*	7,812	—	*
Yi Liu, Custodian for Nicholas Liu(12)	7,812	*	7,812	—	*

* Less than 1%

(1) Applicable percentage ownership is based on 14,508,177 shares of our common stock outstanding as of May 31, 2015.

(2) Assumes the sale of all shares offered in this prospectus.

(3) Annette North is our Senior Vice President, General Counsel.

(4) Antonio Gualberto, M.D., Ph.D. is our Chief Medical Officer.

(5) Consists of shares held of record by ARCH VIII. The GPLP, as the sole general partner of ARCH VIII, may be deemed to beneficially own certain of the shares held of record by ARCH VIII. The GPLP disclaims beneficial ownership of all shares held of record by ARCH VIII in which the GPLP does not have an actual pecuniary interest. The GPLLC, as the sole general partner of the GPLP, may be deemed to beneficially own certain of the shares held of record by ARCH VIII. The GPLLC disclaims beneficial ownership of all shares held of record by ARCH VIII in which it does not have an actual pecuniary interest. Keith Crandell, Clinton Bybee and Robert Nelsen are the managing directors of the GPLLC, and may be deemed to beneficially own certain of the shares held of record by ARCH VIII. The managing directors disclaim beneficial ownership of all shares held of record by ARCH VIII in which they do not have an actual pecuniary interest.

(6) Heidi Henson is our Chief Financial Officer and Secretary.

(7) If I Ran the Circus Irrevocable Trust for the benefit of Aidan Eliasson is a trust for the benefit of Troy Wilson, Ph.D., J.D.'s minor child. Dr. Wilson is our Chairman, President and Chief Executive Officer.

(8) If I Ran the Circus Irrevocable Trust for the benefit of Ethan Eliasson is a trust for the benefit of Troy Wilson, Ph.D., J.D.'s minor child. Dr. Wilson is our Chairman, President and Chief Executive Officer.

(9) Pingda Ren, Ph.D. is our Senior Vice President, Chemistry and Pharmaceutical Sciences.

(10) Troy Wilson, Ph.D., J.D. is the trustee of Red Fish Blue Fish Revocable Trust, dated December 31, 2012. Dr. Wilson is our Chairman, President and Chief Executive Officer.

(11) Robert Hoffman is our Director.

(12) Yi Liu, Ph.D. is our Chief Scientific Officer.

PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling

stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of the third anniversary of the date the registration statement is declared effective by the SEC (or, if later, the third anniversary of the date that all of the shares required to be registered by us have been included in the registration statement) and such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement.

DESCRIPTION OF CAPITAL STOCK

The following statements are qualified in their entirety by reference to the detailed provisions of our amended and restated certificate of incorporation and amended and restated bylaws.

Capital Structure

We currently have authorized capital stock consisting of 210,000,000 shares, of which 200,000,000 shares are designated as common stock, par value $0.0001 per share, and 10,000,000 shares are designated as preferred stock, par value $0.0001 per share.

As of May 31, 2015, 14,508,177 shares of our common stock and no shares of our preferred stock were issued and outstanding. Additionally, as of May 31, 2015, there were 410,000 shares of common stock subject to outstanding stock options granted under our 2014 plan.

Common Stock

The holders of our common stock are entitled to one vote per share on matters on which our stockholders vote. Subject to any preferential dividend rights of any outstanding shares of preferred stock, holders of our common stock are entitled to receive dividends, if declared by our board of directors, out of funds that we may legally use to pay dividends. If we liquidate or dissolve, holders of our common stock are entitled to share ratably in our assets once our debts and any liquidation preference owed to any then-outstanding preferred stockholders are paid. Our amended and restated certificate of incorporation does not provide our common stock with any redemption, conversion or preemptive rights.

Preferred Stock

If we issue preferred stock in the future, such preferred stock may have priority over common stock with respect to dividends and other distributions, including the distribution of assets upon liquidation. Our board of directors has the authority, without further stockholder authorization, to issue from time to time up to 10,000,000 shares of preferred stock in one or more series and to fix the terms, voting rights, designations, preferences, limitations or restrictions of each series. Although we have no present plans to issue any shares of preferred stock, the issuance of shares of preferred stock, or the issuance of rights to purchase such shares, could decrease the amount of earnings and assets available for distribution to the holders of common stock, could adversely affect the rights and powers, including voting rights, of the common stock, and could have the effect of delaying, deterring or preventing a change of control of us or an unsolicited acquisition proposal.

Dividend Policy

We have never paid cash dividends on any of our capital stock and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. We do not intend to pay cash dividends to holders of our common stock in the foreseeable future.

Registration Rights

On March 6, 2015, Prior Kura entered into a registration rights agreement with the investors in the Private Placement and also the existing stockholders of Prior Kura who agreed to become parties to certain provisions of the agreement or who may become parties in the future, which covers substantially all of our outstanding shares of common stock as of May 31, 2015. We assumed the registration rights agreement in connection with the Merger.

The holders of an aggregate of 14,482,070 shares of our common stock, or their permitted transferees, are entitled to rights with respect to the registration of these shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration statement of which this prospectus forms a part, except for shares held by affiliates, subject to applicable lock-up restrictions described in the “Certain Relationships and Related Person Transactions—Lock-Up Provisions in Registration Rights Agreement” section.

Resale Registration Rights

Pursuant to the registration rights agreement and subject to the rules and regulations of the SEC, we have agreed to file a shelf registration statement covering the resale of the shares of our common stock held by the investors in the Private Placement and the shares of our common stock held by the former stockholders of Prior Kura who are parties to the agreement. We were required to file the shelf registration statement by May 5, 2015, 60 days following the date of the registration rights agreement, which we filed on April 17, 2015. The registration statement of which this prospectus forms a part is the shelf registration statement that we are required to file under the registration rights agreement. In the event fewer than all of our outstanding shares of common stock can be registered due to limitations on the use of Rule 415 of the Securities Act for the resale of the shares of common stock, the so-called Rule 415 doctrine, priority will be given to the shares issued in the Private Placement.

Registration of these shares under the Securities Act would result in the shares becoming saleable under the Securities Act immediately upon the effectiveness of such registration, except for shares held by affiliates, subject to applicable lock-up restrictions described in the "Certain Relationships and Related Person Transactions—Lock-Up Provisions in Registration Rights Agreement" section. Any sales of securities by holders of these shares could adversely affect the trading prices, if any, of our common stock.

We will be liable to each investor in the Private Placement (but not to the former stockholders of Prior Kura who are parties to the registration rights agreement) for liquidated damages equal to 1.0% of the aggregate purchase price paid by the investor for the registrable shares of our common stock then held by the investor for each 30-day period, subject to an overall cap of 5%, (i) if we fail to file the registration statement by May 5, 2015, (ii) if the registration statement is not declared effective by July 4, 2015, 120 days from the date of the registration rights agreement, or by August 3, 2015, 150 days from the date of the registration rights agreement, if the registration statement is reviewed by the SEC, (iii) if we suspend (subject to limited blackout periods described below) or terminate the registration statement prior to the date which is the earlier of (x) the third anniversary of its effectiveness (or the third anniversary of the date on which all registrable shares (subject to certain limitations) are included therein, if later) and (y) the date on which all of the registrable shares cease to be registrable shares, or (iv) in the event any suspensions or terminations of the effectiveness of the registration statement exceeds 30 consecutive or when taken together exceed 60 days in the aggregate during any 12-month period.

Form S-3 Demand Registration Rights

Pursuant to the registration rights agreement, at any time after we become eligible to file a registration statement on Form S-3, subject to specified limitations set forth in the registration rights agreement, the holders of a specified percentage of the registrable shares of common stock then outstanding may request that we register on Form S-3 all or a portion of the registrable shares.

"Piggyback" Registration Rights

Pursuant to the registration rights agreement, if we propose to register any of our common stock in a firm commitment underwritten offering, the holders of registrable shares of our common stock will be entitled to notice of the registration and have the right to require us to register all or a portion of the registrable shares then held by them, subject to our right and the right of our underwriters to reduce the number of shares proposed to be registered in view of market conditions.

Expenses of Registration

We have agreed to pay all fees and expenses relating to the registration statement of which this prospectus forms a part, as well as all Form S-3 demand registrations and piggyback registrations, including (i) up to $25,000 in fees of one special counsel for certain of the investors in connection with the filing of the registration statement of which this prospectus forms a part and (ii) up to $25,000 in fees of one special counsel for certain of the investors in connection with the filing of one or more registration statements pursuant to the Form S-3 demand and piggyback registration rights.

Expiration of Registration Rights

The resale registration rights described above shall terminate upon the earlier of (1) the date on which all registrable shares have been effectively registered under the Securities Act and disposed of in accordance with such registration statement, and (2) the later of the third anniversary of the date (A) the registration statement of which this prospectus forms a part is declared effective and (B) all registrable shares (subject to certain limitations) have been registered in the registration statement of which this prospectus forms a part.

Anti-takeover Effects of Our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Our amended and restated certificate of incorporation and amended and restated bylaws contain certain provisions that may have anti-takeover effects, making it more difficult for or preventing a third party from acquiring control of us or changing our board of directors and management. According to our amended and restated certificate of incorporation and amended and restated bylaws, the holders of our common stock do not have cumulative voting rights in the election of our directors. The combination of the present ownership and control of 30.3% of our issued and outstanding common stock by our executive officers and directors as a group and the lack of cumulative voting, makes it more difficult for other stockholders to replace our board of directors or for a third party to obtain control of us by replacing our board of directors.

Delaware Anti-Takeover Law

We are subject to Section 203 of the Delaware General Corporation Law, or Section 203. Section 203 generally prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or
- at or subsequent to the time of the transaction, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of its stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of our outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a "business combination" to include mergers, asset sales and other transactions resulting in financial benefit to a stockholder and an "interested stockholder" as a person who, together with affiliates and associates, owns (or within three years, did own) 15% or more of a corporation's voting stock.

Section 203 could prohibit or delay mergers or other takeover or change in control attempts not approved in advance by our board of directors and, accordingly, may discourage attempts to acquire us even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Provisions of our amended and restated certificate of incorporation and amended and restated bylaws may delay or discourage transactions involving an actual or potential change of control or change in our board of directors or our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws:

- permit our board of directors to issue up to 10,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate (including the right to approve an acquisition or other change of control);
- provide that the authorized number of directors may be changed only by resolution of our board of directors;
- provide that directors may only be removed, subject to any limitation imposed by law, by the holders of at least 66 2/3% of the voting power of all of our then-outstanding shares of the capital stock entitled to vote generally at an election of directors;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent or electronic transmission;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide advance notice in writing, and also specify requirements as to the form and content of a stockholder's notice;
- provide that special meetings of our stockholders may be called only by the chairman of our board of directors, our chief executive officer or by our board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exists any vacancies);
- do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose); and
- provide that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors or officers to us or our stockholders, (3) any action asserting a claim against the us arising pursuant to any provision of the Delaware General Corporation Law or our amended and restated certificate of incorporation or amended and restated bylaws, or (4) any action asserting a claim against us governed by the internal affairs doctrine.

The amendment of any of these provisions, with the exception of the ability of our board of directors to issue shares of preferred stock and designate any rights, preferences and privileges thereto, would require the affirmative vote of the holders of at least 66 2/3% of the voting power of all of our then outstanding common stock.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent and registrar's address is 6201 15th Avenue, Brooklyn, NY 11219.

SHARES ELIGIBLE FOR FUTURE SALE

Future sales of substantial amounts of shares of our common stock, including shares issued upon the exercise of outstanding options, if any, in the public market or the possibility of these sales occurring could cause the prevailing market price for our common stock to fall or impair our ability to raise equity capital in the future. As of May 31, 2015, we had outstanding 14,508,177 shares of common stock. All of these shares are restricted securities under Rule 144, in that they were issued in private transactions not involving a public offering.

Restrictions on the Use of Rule 144 by Shell Companies or Former Shell Companies

Rule 144 is not available for the resale of securities initially issued by companies that are, or previously were, blank check companies like us, to their promoters or affiliates despite technical compliance with the requirements of Rule 144. Rule 144 also is not available for resale of securities issued by any shell companies (other than business combination-related shell companies) or any issuer that has been at any time previously a shell company. The SEC has provided an exception to this prohibition, however, if the following conditions are met:

- the issuer of the securities that was formerly a shell company has ceased to be a shell company;
- the issuer of the securities is subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act;
- the issuer of the securities has filed all Exchange Act reports and materials required to be filed, as applicable, during the preceding 12 months (or such shorter period that the issuer was required to file such reports and materials), other than Form 8-K reports; and
- at least one year has elapsed from the time that the issuer filed current Form 10 type information with the SEC reflecting its status as an entity that is not a shell company.

As a result, none of our stockholders is currently able to sell shares of our common stock in reliance on Rule 144. Assuming we continue to meet the requirements set forth above, Rule 144 will become available to our stockholders on March 12, 2016. Our stockholders may currently resell their shares of our common stock only pursuant to a registration statement that has been declared effective under the Securities Act or pursuant to another exemption from registration.

Lock-Up Provisions in Registration Rights Agreement

The registration rights agreement contains lock-up provisions applicable to holders of our common stock. See “Certain Relationships and Related Person Transactions—Lock-Up Provisions in Registration Rights Agreement.”

Registration Rights

The holders of an aggregate of 14,482,070 shares of our common stock, or their permitted transferees, are entitled to rights with respect to the registration of these shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration statement of which this prospectus forms a part, except for shares held by affiliates, subject to applicable lock-up restrictions described in the “Certain Relationships and Related Person Transactions—Lock-Up Provisions in Registration Rights Agreement” section. See “Description of Capital Stock—Registration Rights” for additional information.

LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus will be passed upon for us by Cooley LLP, San Diego, California.

EXPERTS

Ernst & Young LLP, independent registered accounting firm, has audited our financial statements at December 31, 2014, and for the period from August 22, 2014 (inception) to December 31, 2014, as set forth in their report. We have included our financial statements in the prospectus and elsewhere in the registration statement in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock being offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the common stock offered by this prospectus, you should refer to the registration statement and the exhibits filed as part of that document. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

We are subject to the informational requirements of the Exchange Act and file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, over the Internet at the SEC's website at http://www.sec.gov. You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities. You may also request a copy of these filings, at no cost, by writing or telephoning us at: 11119 N. Torrey Pines Road, Suite 125, La Jolla, California 92037, (858) 500-8800.

KURA ONCOLOGY, INC.

INDEX TO FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Kura Oncology, Inc.

We have audited the accompanying balance sheet of Kura Oncology, Inc. as of December 31, 2014, and the related statement of operations and comprehensive loss, stockholders' deficit, and cash flows for the period from August 22, 2014 (Inception) to December 31, 2014. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Kura Oncology, Inc. at December 31, 2014 and the results of its operations and its cash flows for the period from August 22, 2014 (Inception) to December 31, 2014, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

San Diego, California
March 12, 2015,
except for the common stock exchange described in paragraph 11 of Note 13, as to which the date is
July 2, 2015

Kura Oncology, Inc.
BALANCE SHEET

	December 31, 2014
Assets	
Current assets:	
Cash	$ 1,123,864
Accounts receivable, related party	30,139
Prepaid expenses	42,562
Total current assets	1,196,565
Property and equipment, net	26,646
Prepaid expenses	149,949
Other long-term assets, related party	4,680
Total assets	$ 1,377,840
Liabilities and Stockholders' Deficit	
Current liabilities:	
Accounts payable and accrued expenses	$ 832,933
Accounts payable, related party	134,563
Convertible notes payable, related party, current	2,035,565
Other current liabilities	12,786
Total current liabilities	3,015,847
Convertible notes payable, related party	493,418
Other long-term liabilities	1,294,559
Other long-term liabilities, related party	7,500
Total liabilities	4,811,324
Commitments and contingencies (Note 8)	
Stockholders' deficit:	
Common stock, $0.0001 par value; 25,000,000 shares authorized; 4,943,500 shares issued and 410,626 shares outstanding, excluding 4,532,874 shares subject to repurchase	41
Additional paid-in capital	237,741
Accumulated deficit	(3,671,266)
Total stockholders' deficit	(3,433,484)
Total liabilities and stockholders' deficit	$ 1,377,840

See accompanying notes to financial statements.

Kura Oncology, Inc.
STATEMENT OF OPERATIONS AND COMPREHENSIVE LOSS

	Period From August 22, 2014 (Inception) to December 31, 2014
Operating expenses:	
Research and development	$ 2,028,227
Research and development, related party	624,565
General and administrative	1,261,621
General and administrative, related party	19,734
Total operating expenses	3,934,147
Other income (expense):	
Management fee income, related party	300,000
Interest expense, related party	(37,119)
Total other income	262,881
Net loss and comprehensive loss	$ (3,671,266)
Net loss per share, basic and diluted	$ (25.98)
Weighted average number of shares used in computing net loss per share, basic and diluted	141,306

See accompanying notes to financial statements.

Kura Oncology, Inc.
STATEMENT OF STOCKHOLDERS' DEFICIT

Period from August 22, 2014 (Inception) to December 31, 2014

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount			
Balance as of August 22, 2014 (Inception)	—	$ —	$ —	$ —	$ —
Share-based compensation expense	—	—	236,618	—	236,618
Issuance of restricted stock awards	410,626	41	1,123	—	1,164
Net loss and comprehensive loss	—	—	—	(3,671,266)	(3,671,266)
Balance as of December 31, 2014	**410,626**	**$ 41**	**$237,741**	**$(3,671,266)**	**$(3,433,484)**

See accompanying notes to financial statements.

Kura Oncology, Inc.
STATEMENT OF CASH FLOWS

	Period From August 22, 2014 (Inception) to December 31, 2014
Operating activities	
Net loss	$ (3,671,266)
Adjustments to reconcile net loss to net cash used in operating activities:	
Share-based compensation expense	236,618
Depreciation expense	1,466
Issuance of convertible note for acquisition of license	500,000
Changes in operating assets and liabilities:	
Accounts receivable, related party	(30,139)
Prepaid expenses	(42,562)
Other long-term assets	(149,949)
Other long-term assets, related party	(4,680)
Accounts payable and accrued expenses	832,933
Accounts payable, related party	134,563
Accrued interest, related party	36,483
Other liabilities	1,307,345
Net cash used in operating activities	(849,188)
Investing activities	
Purchases of property and equipment	(28,112)
Net cash used in investing activities	(28,112)
Financing activities	
Proceeds from issuance of related party convertible notes	2,000,000
Proceeds from the issuance of restricted stock awards	1,164
Net cash provided by financing activities	2,001,164
Net increase in cash	1,123,864
Cash at beginning of period	—
Cash at end of period	$ 1,123,864

See accompanying notes to financial statements.

Kura Oncology, Inc.
Notes to Financial Statements

December 31, 2014

1. Organization and Basis of Presentation

Kura Oncology, Inc. (the "Company"), a privately held company incorporated in Delaware, is a clinical stage biopharmaceutical company discovering and developing personalized therapeutics for the treatment of solid tumors and blood cancers. The Company focuses on the development of small molecule product candidates that target cell signaling pathways that are important to driving the progression of certain cancers. The Company aims to employ molecular diagnostics to identify patients with cancers who are likely to benefit from our targeted product candidates.

From August 22, 2014 (inception) through December 31, 2014, the Company has devoted substantially all of its efforts to research, product development, raising capital, and building infrastructure. The Company has a limited operating history and the sales and income potential of the Company's business and market are unproven. The Company has experienced net losses and negative cash flows from operating activities, and had an accumulated deficit of $3,671,266 as of December 31, 2014.

The Company expects to continue to incur net losses into the foreseeable future. Successful transition to attaining profitable operations is dependent upon achieving a level of revenues adequate to support the Company's cost structure. The Company plans to continue to fund its losses from operations and capital funding needs through future debt and equity financing or through collaborations or partnerships with other companies. If the Company is not able to secure adequate additional funding, the Company may be forced to make reductions in spending, liquidate assets where possible, or suspend or curtail planned programs. Any of these actions could materially harm the Company's business, results of operations and future prospects. The Company believes that its existing cash resources will be sufficient to fund its operations through at least December 31, 2015.

2. Summary of Significant Accounting Policies

Use of Estimates

The Company's financial statements are prepared in accordance with accounting principles generally accepted in the United States ("GAAP"). The preparation of the Company's financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period.

Reported amounts and note disclosures reflect the overall economic conditions that are most likely to occur and anticipated measures management intends to take. Actual results could differ materially from those estimates. All revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits and limits its exposure to cash risk by placing its cash with credit quality rating financial institutions.

Property and Equipment

Property and equipment are stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets which is three years for each asset class.

Impairment of Long-Lived Assets

The Company reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. If such circumstances are determined to exist, an estimate of undiscounted future cash flows produced by the long-lived asset, including its eventual residual value, is compared to the carrying value to determine whether impairment exists. In the event that such cash flows are not expected to be sufficient to recover the carrying amount of the assets, the assets are written-down to their estimated fair values. While the Company's current and historical operating losses and negative cash flows are indicators of impairment, the Company believes that future cash flows to be received support the carrying value of its long-lived assets and, accordingly, has not recognized any impairment losses through December 31, 2014.

Convertible Notes and Derivative Accounting

At inception, the Company performs an assessment of all embedded features of a debt instrument to determine if (1) such features should be bifurcated and separately accounted for, and (2) if bifurcation requirements are met, whether such features should be classified and accounted for as equity or liability. The fair value of the embedded feature is measured initially, included as a liability on the balance sheet, and remeasured each reporting period. Any changes in fair value are recorded in the statement of operations. The Company monitors, on an ongoing basis, whether events or circumstances could give rise to a change in its classification of embedded features.

The Company accounts for its convertible notes, that may be settled in cash upon conversion (including partial cash settlement), by separating the liability and equity components of the instruments in a manner that reflects the Company's nonconvertible debt borrowing rate. The Company determines the carrying amount of the liability component by measuring the fair value of similar debt instruments that do not have the conversion feature. If a similar debt instrument does not exist, the Company estimates the fair value by using assumptions that market participants would use in pricing a debt instrument, including market interest rates, credit standing, yield curves and volatilities. Determining the fair value of the debt component requires the use of accounting estimates and assumptions. These estimates and assumptions are judgmental in nature and could have a significant impact on the determination of the debt component and the associated non-cash interest expense.

Deferred Rent

Deferred rent consists of the difference between cash payments and the recognition of rent expense on a straight-line basis for the facilities the Company occupies. The Company's lease for its facilities provides for fixed increases in minimum annual rental payments. The total amount of rental payments due over the lease term is being charged to rent expense ratably over the life of the lease. The Company's deferred rent balance is contained within other long-term liabilities on the Company's Balance Sheet.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development costs consist of direct and indirect internal costs related to specific projects as well as fees paid to other entities that conduct certain research activities on the Company's behalf. Payments that the Company makes in connection with in-licensed technology for a particular research and development project that have no alternative future uses (in other research and development projects or otherwise) and therefore no separate economic values are expensed as research and development costs at the time such costs are incurred. As of December 31, 2014, the Company has no in-licensed technologies that have alternative future uses in research and development projects or otherwise.

Patent Costs

The Company expenses all costs as incurred in connection with patent applications, including direct application fees, and the legal and consulting expenses related to making such applications, and such costs are included in general and administrative expenses within the Company's Statement of Operations and Comprehensive Loss.

Share-Based Compensation

Restricted stock awards are valued based on the fair value on the grant date. The fair value of restricted stock awards expected to vest are recognized on a straight-line basis over the requisite service period of the award. Restricted stock awards granted to non-employees are recorded at their fair value on the earlier of the performance commitment date or the date the services required are completed and are remeasured at fair value during the service period. As non-employee restricted stock awards vest, they are remeasured at fair value and expensed based on the intrinsic value method which is measured as the difference between the exercise price paid for the restricted stock award and the fair value of the shares as the right of the repurchase lapses each vesting period.

The Company's equity incentive plan allows for the issuance of restricted stock awards to employees and non-employee consultants that may be subject to vesting. The unvested shares of any restricted stock awards are held in escrow as the stock award vests or until award holder termination, whichever occurs first. In the event of a termination, the Company has the right of repurchase, at its option, for the portion of unvested stock awards from the terminated award holder. The repurchase price for unvested stock awards will be the lower of (i) the fair market value of the shares of common stock on the date of repurchase or (ii) their original purchase price. For all unvested stock awards, a liability is established related to the cash received for the unvested portion of the stock award, which represents the Company's obligation if all award holders were to be terminated, and is recorded within other long-term liabilities on the Company's Balance Sheet.

Income Taxes

Income taxes have been accounted for using the asset and liability method. Under the asset and liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates applicable to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance against deferred tax assets is recorded if, based upon the weight of all available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. For uncertain tax positions that meet "a more likely than not" threshold, the Company recognizes the benefit of uncertain tax positions in the financial statements.

Comprehensive Loss

The Company is required to report all components of comprehensive loss, including net loss, in the financial statements in the period in which they are recognized. Comprehensive loss is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources, including unrealized losses on investments. Net loss and comprehensive loss were the same for the period presented, therefore, a separate statement of comprehensive loss is not included in the accompanying financial statements.

Segment Reporting

Operating segments are components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision-maker for purposes of making decisions regarding resource allocation and assessing performance. To date, the Company has viewed its operations and managed its business as one segment operating primarily in the United States.

Fair Value Measurements

The Company categorizes its assets and liabilities measured at fair value in accordance with the authoritative accounting guidance that establishes a consistent framework for measuring fair value, and expands disclosures for each major asset and liability category measured at fair value on either a recurring or nonrecurring basis. Fair value is defined as the exit price, representing the amount that would be received to sell an asset or

paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

- Level 1- Quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2- Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable; and
- Level 3- Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

At December 31, 2014, the Company did not have financial assets that are measured at fair value on a recurring basis. The carrying amounts of the Company's financial instruments, which include cash, prepaid expenses, accounts payable, accrued expenses and all related party amounts approximate their fair values at December 31, 2014, primarily due to their short-term nature. The Company believes the fair value of its convertible notes approximates their carrying value as of December 31, 2014. No transfers between levels have occurred during the periods presented. Liabilities measured at fair value on a recurring basis as of December 31, 2014 are as follows:

		Fair Value Measurements at December 31, 2014		
	Balance as of December 31, 2014	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Liabilities				
Embedded derivative liability(1)	$ 196,000	$ —	$ —	$ 196,000

(1) The Company's license agreement with the with The Regents of the University of California San Francisco ("UCSF"), further described in Note 7, provides for an indexed milestone payment upon the occurrence of a qualified preferred stock financing and a subsequent initial public offering or a change of control event, as defined in the agreement. The indexed milestone was determined to qualify as an embedded derivative liability requiring an estimate of fair value.

The Company estimates the fair value of its derivative liabilities at the time of issuance and subsequent remeasurement at each reporting date using a probability model that considers the probability of achieving the events that would trigger such liabilities and the estimated time period the liabilities would be outstanding. The estimates are based, in part, on subjective assumptions and could differ materially in the future. Changes to these assumptions can have a significant impact on the fair value of the derivative liabilities.

The following table provides a reconciliation of all liabilities measured at fair value using Level 3 significant unobservable inputs:

	Derivative Liabilities
Balance at August 22, 2014 (Inception)	$ —
Issuance of derivative liability(1)	196,000
Change in fair value(2)	—
Balance at December 31, 2014	$196,000

(1) The amount is included within research and development expenses on the Company's Statement of Operations and Comprehensive Loss.
(2) The license agreement was executed in November 2014 and no change in the valuation occurred between the execution date and December 31, 2014.

Net Loss per Share

Basic net loss per share is calculated by dividing the net loss by the weighted-average number of common shares outstanding for the period, without consideration for common stock equivalents. Diluted net loss per share is calculated by dividing the net loss by the weighted-average number of common share equivalents outstanding for the period determined using the treasury-stock method. Dilutive common stock equivalents are comprised of unvested restricted stock awards outstanding under the Company's equity plan. For all periods presented, there is no difference in the number of shares used to calculate basic and diluted shares outstanding due to the antidilutive effect of the securities.

Potentially dilutive securities, which includes unvested stock awards of 4,532,874 are excluded from the calculation of diluted net loss per share due to the anti-dilutive effect of the securities. In addition, the Company has $2,500,000 in principal of outstanding convertible promissory notes, issued in October and December 2014, that are convertible into common stock upon the occurrence of various future events at prices that are not determinable until the occurrence of those future events. As such, the Company has excluded these convertible notes payable from the calculation of diluted net loss per share.

3. Recent Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board ("FASB") or other standard setting bodies that are adopted by the Company as of the specified effective date. Unless otherwise discussed, the Company believes that the impact of recently issued standards that are not yet effective will not have a material impact on our financial position or results of operations upon adoption.

In May 2014, the FASB issued Accounting Standard Update ("ASU") 2014-09, Revenue from Contracts with Customers (Topic 606), which will replace numerous requirements in U.S. GAAP, including industry-specific requirements, and provide companies with a single revenue recognition model for recognizing revenue from contracts with customers. The core principle of the new standard is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The new standard will be effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. The Company is currently evaluating the impact the adoption of this guidance will have on its Financial Statements and future operating results.

In June 2014, the FASB issued ASU 2014-10, Development Stage Entities (Topic 915), an accounting standards update that removes the financial reporting distinction between development stage entities and other reporting entities from GAAP. In addition, the amendments eliminate the requirements for development stage entities to: (1) present inception-to-date information in the statements of income, cash flows, and shareholder equity, (2) label the financial statements as those of a development stage entity, (3) disclose a description of the development stage activities in which the entity is engaged, and disclose in the first year in which the entity is no longer a development stage entity that in prior years it had been in the development stage. The guidance is effective prospectively for fiscal years, and interim periods within those years, beginning after December 15, 2014. The Company's early adoption of the standard eliminated the requirement to disclose inception-to-date information or incremental financial reporting requirements related to development stage entities and does not have any additional impact on the Company's financial statement or disclosures.

In August 2014, the FASB issued ASU 2014-15, Presentation of Financial Statements-Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern. Under the new guidance, management will be required to assess an entity's ability to continue as a going concern, and to provide related footnote disclosures in certain circumstances. The provisions of this ASU are effective for annual periods beginning after December 15, 2016, and for annual and interim periods thereafter. The Company is currently evaluating the potential changes from this ASU to its future financial reporting and disclosures.

4. Property and equipment, net

Property and equipment consisted of the following:

	December 31, 2014
Computer equipment	$ 25,862
Software	2,250
	28,112
Less: accumulated depreciation	(1,466)
Property and equipment, net	$ 26,646

5. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities consisted of the following:

	December 31, 2014
Accounts payable	$ 225,642
Accrued expenses	567,887
Accrued compensation and benefits	39,404
Total accounts payable and accrued expenses	$ 832,933

6. Notes Payable

Araxes Convertible Note

On October 8, 2014, the Company entered into a Note Purchase Agreement and Convertible Promissory Note with its affiliated company Araxes Pharma LLC (“Araxes”) under which Araxes provided a $2,000,000 loan in the form of a convertible promissory note. The note contains interest computed at a rate of 8%, compounded annually, with a maturity date of the earliest to occur of: (i) December 31, 2015, (ii) upon a change in control, as defined in the agreement, or (iii) upon defined events of default. Interest is due and payable on the maturity date. Prepayment of principal or interest is not allowed on the note without the prior written consent of Araxes. The note is automatically converted into such class of stock of the Company issued upon the completion of a qualified initial public offering (“IPO”) or upon the completion of a qualified financing, as defined in the agreement, in an amount equal to the total unpaid principal and interest divided by the price per share offered to the public in the qualified IPO or the price per share of the equity securities paid by other investors in a qualified financing. The Convertible Promissory Note contains customary events of default, and is recorded at its redemption amount, or at cost, within notes payable- related party, current on the Company’s Balance Sheet.

Araxes Asset Purchase Agreement—Convertible Note

As consideration for the patents acquired under the Araxes Asset Purchase agreement entered into on December 23, 2014 (described further in Note 7), Araxes issued a convertible promissory note equal to the purchase price of the patent rights of $500,000. The note contains interest computed at a rate of 8% with a maturity date of the earliest to occur: (i) of May 31, 2016 (ii) upon a change in control, as defined in the agreement, or (iii) upon defined events of default. The note may not be prepaid. The note will automatically convert into such class of stock of the Company issued upon the completion of a qualified equity financing at the lowest per share price offered in the round. The Convertible Promissory Note contains customary events of default, and is recorded at its redemption amount within notes payable-related party, noncurrent on the Company’s Balance Sheet.

Total notes payable and unamortized discount balances are as follows:

	December 31, 2014
Face value of convertible notes	$ 2,500,000
Accrued interest	36,483
Debt issuance costs associated with fair value of derivative	(7,500)
Total	$ 2,528,983
Less: current portion	(2,035,565)
Total convertible notes, long-term	$ 493,418

7. License and Asset Purchase Agreements

Janssen License Agreement

On December 18, 2014, the Company entered into a license agreement with Janssen Pharmaceutica NV ("Janssen"), a foreign entity headquartered in Belgium and an affiliate of Johnson & Johnson, Inc., under which the Company received certain intellectual property rights related to tipifarnib in the field of oncology for a non-refundable $1,000,000 upfront license fee and payments upon achievement of certain development and sales-based milestones. Tipifarnib is a clinical stage compound and all ongoing development, regulatory and commercial work will be completed fully and at the sole expense of the Company. Under the license agreement, Janssen has a first right to negotiate for an exclusive license back from the Company to develop and commercialize tipifarnib on terms to be negotiated in good faith. Janssen may exercise this right of first negotiation during a 60-day period following delivery of clinical data as specified in the agreement.

The agreement will terminate upon the last-to-expire patent rights or last-to-expire royalty term, or may be terminated by the Company with 180 days written notice of termination. Either party may terminate the agreement in the event of material breach of the agreement that is not cured within 45 days. Janssen may also terminate the agreement due to the Company's lack of diligence that is not cured within a three-month period.

The upfront license fee was paid in January 2015. Subsequent to such payment, in accordance with the agreement the Company entered into a convertible promissory note with Janssen's affiliated company, Johnson & Johnson Innovation—JJDC, Inc. ("JJDC") as described further in Note 13. Due to the long-term nature of the note, the full amount of the unpaid upfront fee is included within other long-term liabilities on the Company's Balance Sheet as of December 31, 2014.

The University of Michigan License Agreement

On December 22, 2014, the Company entered into a license agreement with The Regents of The University of Michigan ("Michigan") under which the Company received certain license rights for a non-refundable upfront license, annual maintenance fees and payments upon achievement of certain development and sales-based milestones. The licensed asset consists of a number of compounds, which are in the lead discovery/lead optimization phase. All future development, regulatory and commercial work on the asset will be completed fully and at the sole expense of the Company. Michigan retains the right to use the asset for non-commercial research, internal and/or educational purposes, with the right to grant the same limited rights to other non-profit research institutions. Furthermore, the agreement, as amended on March 3, 2015, stipulates contingent consideration for the issuance of shares equivalent to a set dollar value upon the occurrence of a qualified capital stock financing or a change of control event, as defined in the amended agreement, consistent with the terms issued to any future investors or the per share consideration to be received by other shareholders. See Note 13 for further discussion.

The agreement will terminate upon the last-to-expire patent rights, or may be terminated by the Company at any time with 90 days written notice of termination or terminated by Michigan upon a bankruptcy by the Company, payment failure by the Company that is not cured within 30 days or a material breach of the agreement by the Company that is not cured within 60 days.

The University of San Francisco License Agreement

On November 21, 2014, the Company entered into a license agreement with UCSF under which the Company received certain license rights. The agreement provided for an upfront payment as well as contingent milestone payments. Additionally, the agreement provides for a one-time indexed milestone payment upon the occurrence of an initial public offering or a change of control event following a qualified financing, as defined in the agreement. The indexed milestone was determined to qualify as an embedded derivative liability requiring an estimate of fair value. See Note 2 for further detail.

Collectively, the license agreements with Janssen, Michigan and UCSF provided for non-refundable upfront payments totaling $1,075,000. Each of these license agreements was individually deemed an asset acquisition, which required the Company to expense the full upfront acquisition price due to the preliminary stage of development and no identified alternative future use upon the agreement execution date. The expense is included within research and development expenses in the Company's Statement of Operations and Comprehensive Loss. In addition, the license agreements collectively provide for specified development, regulatory and sales-based milestone payments up to a total of $81,675,000 payable upon occurrence of each stated event, of which $1,175,000 relates to the initiation of certain development activities, $30,500,000 relates to the achievement of specified regulatory approvals for the first indication and up to $50,000,000 for the achievement of specified levels of product sales. Additional payments will be due for each subsequent indication if specified regulatory approvals are achieved. All milestone payments under the agreement will be recognized as research and development expense upon completion of the required events because the triggering events are not considered to be probable until they are achieved. As of December 31, 2014, the Company has not achieved any milestones under the agreements. Furthermore, if all the programs are successfully commercialized, the Company will be required to pay tiered royalties on annual net product sales ranging from the low single digits to the low teens, depending on the volume of sales and the respective agreement.

Araxes Asset Purchase Agreement

On December 23, 2014, the Company entered into an asset purchase agreement with Araxes under which the Company purchased certain early stage patent rights related to compounds in the field of oncology for a purchase price of $500,000 payable under a convertible promissory note. All ongoing development, regulatory and commercial work will be completed fully and at the sole expense of the Company. The agreement allows for contingent milestone payments of $9,650,000 throughout development and commercialization of the asset, of which $1,150,000 relates to the initiation of certain development activities, and $8,500,000 relates to the submission of certain regulatory filings and receipt of certain regulatory approvals. Additional payments will be due for each subsequent indication if specified regulatory approvals are achieved. The Company will recognize the milestones as expense when each event occurs. As of December 31, 2014, the Company has not achieved any milestones under the agreement. Furthermore, if the program is successfully commercialized, the Company will be required to pay tiered royalties on annual net product sales ranging in the low single digits, depending on the volume of sales.

The transaction was deemed an asset acquisition, which required the Company to expense the full upfront acquisition price due to the preliminary stage of development and no identified alternative future use upon the agreement execution date and is included within research and development expenses, related party in the Company's Statement of Operations and Comprehensive Loss. All additional milestone payments under the agreement will be recognized upon completion of the required events because the triggering events will not be considered to be probable until they are achieved.

8. Commitments and Contingencies

On August 29, 2014, the Company entered into a sublease agreement (the "sublease") with its affiliated company, Araxes, for office space for a monthly rent of $4,680 per month. The lease includes rent escalation of

3% per year. The lease was amended on December 18, 2014 for monthly rent of $4,820 per month and retrospectively applied from September 1, 2014 in accordance with the agreement. In addition to the base monthly rent, the Company is obligated to pay for operating expenses, taxes, insurance, and utilities applicable to the subleased property. The sublease will expire on August 30, 2016.

On September 30, 2014, the Company entered into a lease agreement (the "lease") with Regus for office space located in Cambridge, Massachusetts. The lease commenced on October 6, 2014 with monthly rent of $4,785 per month. Rent expense is recognized using the straight-line method over the term of the lease. In addition to the base monthly rent, the Company is obligated to pay for operating expenses, taxes, insurance and utilities applicable to the leased property. The lease will expire on October 31, 2016.

Future minimum payments required under the leases as of December 31, 2014 are summarized as follows:

Year Ending December 31,	
2015	$ 111,062
2016	87,573
Total minimum lease payments	$198,635

Total lease expense for the period from August 22, 2014 (inception) to December 31, 2014 was $27,249.

The Company is obligated to make a charitable gift of $285,000 to the Leukemia and Lymphoma Society in connection with the Michigan agreement described in Note 7 to be paid in three equal parts: the first part due in January 2015, the second part due in January 2016 and the final part due in January 2017. The full amount of the charitable gift has been accrued as of December 31, 2014.

9. Stockholders' Equity

Common Stock

As of December 31, 2014, 556,500 shares were reserved for future issuance pursuant to shares authorized for future option grants. In addition, the Company has $2,500,000 in principal of outstanding convertible promissory notes, issued in October and December 2014, that are convertible into stock upon the occurrence of various future events at prices that are not determinable until the occurrence of those future events.

Restricted Stock Awards

In August 2014, the Company adopted the 2014 Equity Incentive Plan ("the 2014 Plan"). A total of 5,500,000 shares were initially reserved for issuance under the 2014 Plan. The 2014 Plan provides equity-based incentives in the form of stock awards to employees and other providers of services to the Company. The 2014 Plan provides for the grant of incentive stock options, non-statutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, and other stock awards to eligible recipients. Recipients of incentive stock options shall be eligible to purchase shares of the Company's common stock at an exercise price equal to no less than the estimated fair market value of such stock on the date of grant. The maximum term of options to be granted under the Plan is ten years. No options were granted under the plan as of December 31, 2014.

Restricted stock awards were granted at a price equal to estimated fair market value. The restricted stock awards generally vest over four years from the original vesting date, with certain grants subject to one-year cliff vesting. The vesting provisions of individual awards may vary as approved by the Company's Board of Directors. In connection with the issuance of restricted common stock, the Company maintains a repurchase right

where shares of restricted common stock are released from such repurchase right over a period of time of continued service by the recipient. The following is a summary of restricted share activity:

	Number of Shares	Weighted Average Grant Date Fair Value
Balance at August 22, 2014 (Inception)	—	$ —
Granted	4,943,500	$ 0.002
Vested	(410,626)	
Unvested at December 31, 2014	4,532,874	$ 0.002
Vested at December 31, 2014	410,626	$ 0.002

The shares purchased by the recipients pursuant to unvested restricted stock awards are not deemed, for accounting purposes, to be outstanding until those shares vest. The cash received in exchange for unvested shares related to stock awards granted is recorded as a liability for the early exercise of stock options on the accompanying balance sheet and will be transferred into common stock and additional paid-in capital as the shares vest. As of December 31, 2014, the Company recorded $12,786 of liability associated with shares issued with repurchase rights, of which $10,030 and $2,756 was related to employee and non-employee restricted stock awards, respectively.

During the period from August 22, 2014 (inception) to December 31, 2014, the Company granted 4,096,000 and 847,500 shares underlying restricted stock awards to employees and non-employees, respectively, at a weighted average price of $0.002. All employee and non-employee restricted stock awards vest over a four-year period beginning on the vesting commencement date. Certain non-employee restricted stock award agreements provide for acceleration of vesting prior to the completion of the service period upon the occurrence of specified events, including the Merger. As of December 31, 2014, there were 4,532,874 shares subject to repurchase, of which 3,773,916 and 758,958 shares were related to employee and non-employee restricted stock awards, respectively. As of December 31, 2014, 556,500 shares of common stock were reserved for future stock awards under the 2014 Plan.

For the period from August 22, 2014 (inception) to December 31, 2014, 322,084 and 88,542 shares underlying restricted stock awards granted to employees and non-employees, respectively, vested. The Company recognized $236,618 in share-based compensation expense related to the vested portion of the restricted stock awards granted to non-employees for the period from August 22, 2014 (inception) to December 31, 2014, of which $232,602 was charged to research and development expense and $4,016 to general and administrative expense. There was no share-based compensation expense recognized related to employee awards because the Company received proceeds equal to grant date estimated fair value of the employee awards.

10. Related Party Transactions

The Company’s president and chief executive officer is also the managing member of its affiliated company, Araxes. Four individuals are significant stockholders of each of the Company and Araxes. The following is a summary of all transactions with Araxes from August 22, 2014 (inception) to December 31, 2014.

Convertible Promissory Notes

As described in Note 6, the Company entered into a Note Purchase Agreement and Convertible Promissory Note with Araxes under which Araxes provided a $2,000,000 loan in the form of a convertible promissory note. The note is included within notes payable, related party, current on the Company’s Balance Sheet.

Additionally, in conjunction with the asset purchase agreement with Araxes described in Note 7, the Company purchased assets for an upfront purchase price of $500,000 payable under a convertible promissory note. This amount is included with research and development expenses, related party on the Company's Statement of Operations and Comprehensive Loss. Additionally, the note is included within notes payable, related party, noncurrent on the Company's Balance Sheet.

Facility Sublease

As noted in Note 8, the Company subleases office space from Araxes for a monthly rent of $4,820 per month. In addition to the base monthly rent, the Company is obligated to pay for operating expenses, taxes, insurance, and utilities applicable to the subleased property. Rent expense related to this sublease for the period from August 22, 2014 (inception) to December 31, 2014 was $14,906. The sublease will expire on August 30, 2016.

Management Fees

The Company has a management services agreement with Araxes under which Araxes pays the Company a fixed $100,000 a month for management services. In addition, the agreement allows for Araxes to pay the Company an amount equal to the number of full time equivalents ("FTE") performing collaboration services for Araxes, at an FTE rate of $350,000, plus actual expenses as reasonably incurred. The agreement has an initial term expiring on December 31, 2015 and renews automatically for additional consecutive one-year periods. The agreement may be terminated by either party with a notice of at least 30 days prior to December 31, 2015 or the expiration of the then-renewal term.

Services Agreement

The Company has a services agreement with Araxes which allows for payment of research and development services provided to the Company of an amount equal to the number of FTE's performing the services, at an FTE rate of $400,000, plus actual expenses as reasonably incurred. This services agreement has an initial term expiring on December 31, 2015 and renews automatically for additional consecutive one-year periods. The agreement may be terminated by either party with a notice of at least 30 days prior to December 31, 2015 or the expiration of the then-renewal term.

11. Employee Benefit Plan

The Company has a defined contribution 401(k) plan (the Plan) for all employees. Employees are eligible to participate in the Plan if they are at least 21 years of age or older. Under the terms of the Plan, employees may make voluntary contributions as a percentage of compensation.

12. Income Taxes

The Company was incorporated on August 22, 2014 and will file tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company's 2014 tax year will be subject to examination by the federal and state jurisdictions where applicable. The Company has not been, nor is it currently, under examination by the federal or any state tax authority.

The Company's effective income tax differs from the statutory federal rate of 34% at December 31, 2014 due to the following:

	Period from August 22, 2014 (Inception) to December 31, 2014
Benefit for income taxes at statutory federal rate	$ (1,248,230)
State income tax (benefit), net of federal benefit	(224,752)
Share-based compensation	80,450
Research and development tax credits	(28,288)
Other	13,307
Valuation allowance	1,407,513
Income tax expense	$ —

Significant components of the Company's deferred tax assets at December 31, 2014 are shown below:

	December 31, 2014
Deferred tax assets	
Intangibles	$ 731,622
Net operating loss carryforwards	441,622
Research and development tax credit carryforwards	28,288
Accruals	204,608
Other	1,373
Total deferred tax assets	1,407,513
Less valuation allowance	(1,407,513)
Net deferred tax assets	$ —

At December 31, 2014, the Company had federal and state net operating loss carryforwards of $1,087,279 and $1,248,532 respectively. The federal and state loss carryforwards begin to expire in 2034, unless previously utilized. The Company also has federal and state research credit carryforwards of $17,919 and $15,710, respectively. The federal and Massachusetts research credits will begin expiring in 2034 and 2029, respectively, unless previously utilized. The California research credit will carryforward indefinitely.

Management assesses the available positive and negative evidence to estimate if sufficient future taxable income will be generated to use existing deferred tax assets. Based on the weight of the evidence, including the Company's limited existence and losses since inception, management has determined that it is more likely than not that the deferred tax assets will not be realized. A valuation allowance of $1,407,513 for the period ended December 31, 2014 has been established to offset the deferred tax assets as realization of such assets is uncertain.

Pursuant to Internal Revenue Code (IRC) Sections 382 and 383, annual use of the Company's net operating loss and research and development credit carryforwards may be limited in the event a cumulative change in ownership of more than 50% occurs within a three-year period. The Company has not completed an IRC Section 382/383 analysis regarding the limitation of net operating loss and research and development credit carryforwards. The Company does not expect this analysis to be completed within the next 12 months. Due to the existence of the valuation allowance, future changes in the Company's unrecognized tax benefits will not impact the Company's effective tax rate. Any carryforwards that will expire prior to utilization as a result of such limitations will be removed from deferred tax assets, with a corresponding reduction of the valuation allowance.

The impact of an uncertain income tax position is recognized at the largest amount that is "more likely than not" to be sustained upon audit by the relevant taxing authority. An uncertain tax position will not be recognized

if it has less than a 50% likelihood of being sustained. There are no unrecognized tax benefits included in the Company's balance sheet at December 31, 2014. The Company's practice is to recognize interest and penalties related to income tax matters in income tax expense. The Company has not recognized interest or penalties in its statement of operations for the period ended December 31, 2014.

The Company does not expect that there will be a significant change in the unrecognized tax benefits over the next twelve months. Due to the existence of the valuation allowance, future changes in the Company's unrecognized tax benefits will not impact the Company's effective tax rate.

13. Subsequent Events

The Company evaluated all events or transactions that occurred after the balance sheet date of December 31, 2014 through March 12, 2015.

Note Purchase Agreement

On January 12, 2015, the Company entered into a Note Purchase Agreement and Convertible Promissory Note with various persons and entities named within the agreement ("the Holders") under which the Holders provided a $3,000,000 loan in the form of a convertible promissory note ("the Note") to be used solely to fund the operations of the Company. The Note contains interest computed at a rate of 8%, compounded annually, with a maturity date of the earliest to occur of: (i) December 31, 2015, (ii) upon a change in control, as defined in the agreement, or (iii) upon defined events of default. Interest is due and payable on the maturity date. Prepayment of principal or interest is not allowed on the Note without the prior written consent of the holders. The Note is mandatorily convertible into such class of stock of the Company issued upon the completion of a qualified initial public offering or qualified financing, as defined in the agreement, in an amount equal to the total unpaid principal and interest divided by the price per share offered to the public in the qualified IPO or the price per share of the equity securities paid by other investors in a qualified financing.

Convertible Promissory Note

On January 20, 2015, in accordance with the Janssen license agreement described in Note 7, the Company entered into a Convertible Promissory Note with JJDC for $1,000,000. The note contains interest computed at a rate of 8% with a maturity date of the earliest to occur of: (i) May 31, 2016, (ii) upon a change in control, as defined in the agreement, or (iii) upon defined events of default. Interest is due and payable on the maturity date, with prepayment of principal or interest not allowed. The note will automatically convert into such class of shares of the Company issued upon the completion of a qualified equity financing at the lowest per share price offered in the round.

February 2015 Note Purchase Agreement

On February 11, 2015, the Company entered into a Note Purchase Agreement and Convertible Promissory Notes with entities named within the agreement ("the February 2015 Note Holders") under which the February 2015 Note Holders provided totaling $1,000,000 loan in the form of convertible promissory notes. These Convertible Promissory Notes contain interest computed at a rate of 8%, compounded annually, with a maturity date of the earliest to occur of: (i) December 31, 2015, (ii) upon a change in control, as defined in the agreement, or (iii) upon defined events of default. Interest is due and payable on the maturity date. Prepayment of principal or interest is not allowed on the note without the prior written consent of the holders. The notes will automatically convert into such class of stock of the Company issued upon the completion of a qualified initial public offering or qualified financing, as defined in the agreement, in an amount equal to the total unpaid principal and interest divided by the price per share offered to the public in the qualified IPO or the price per share of the equity securities paid by other investors in a qualified financing.

Sponsored Research Agreement

On February 15, 2015, the Company entered into a Sponsored Research Agreement with Michigan under which the Company will sponsor up to $2,725,000 of research at Michigan over a three-year period. The Company will receive an non-exclusive right to any technology developed under the agreement and has an option right for an exclusive right to any such licenses developed under the agreement. The Sponsored Research Agreement allows for termination with notice at any time by the Company. In the event of termination by the Company prior to the second anniversary of the agreement, other than due to breach by Michigan, the Company will be required to pay costs budgeted through the second anniversary up to $2,000,000 of the sponsored research amount. Any costs incurred for the Sponsored Research Agreement will be expensed as incurred.

Michigan Amended License Agreement

On March 3, 2015, the Company and Michigan entered into an amendment to the Michigan license agreement which redefined a qualified financing as the first sale of the Company's capital stock in which the Company receives certain gross proceeds from the financing. The sale of the Company's common stock on March 6, 2015 as described below was a qualified financing.

Merger and Private Financing

On March 6, 2015, the Company, Zeta Acquisition Corp. III, a public shell company ("Zeta"), and Kura Operations, Inc., a wholly-owned subsidiary of Zeta ("Merger Sub"), entered into an Agreement and Plan of Merger dated March 6, 2015 (the "Merger Agreement"). Pursuant to the Merger Agreement, Merger Sub merged with and into the Company, with the Company remaining as the surviving entity and a wholly-owned operating subsidiary of Zeta (the "Merger"). At the effective time of the Merger (the "Effective Time"), the name of the Company was changed to Kura Operations, Inc. Immediately following the Effective Time, a newly organized wholly-owned subsidiary of Zeta named "Kura Oncology, Inc." merged with and into Zeta, with the surviving entity named Kura Oncology, Inc. ("Parent").

Pursuant to the terms of the Merger Agreement, at the Effective Time, each share of common stock of the Company outstanding immediately prior to the Effective Time was exchanged for one-half (0.5) of a share of common stock of Parent. Parent issued an aggregate of 14,508,177 shares of common stock upon such exchange of the issued shares of the Company common stock. In addition, at the Effective Time, Parent assumed the Company's 2014 Plan. As of the Effective Time, there were no outstanding options to purchase shares of the Company common stock under the 2014 Plan.

Immediately prior to the Merger, on March 6, 2015, the Company sold to investors 8,280,696 shares of its common stock at a price of $6.32 per share for gross proceeds of $52,334,011 (the "New Money Financing"). The New Money Financing represented a qualified financing conversion event pursuant to the outstanding convertible promissory notes. As such, upon closing the New Money Financing, $7,500,000 in principal and $114,849 in accrued interest through February 28, 2015 automatically converted into 1,204,870 shares of the Company's common stock.

The Company is considered the accounting acquirer in the Merger and will account for the transaction as a capital transaction because the Company's stockholders received 100% of the voting rights in the combined entity and the Company's senior management represents all of the senior management of the combined entity.

The accompanying financial statements and notes to the financial statements give retroactive effect to reflect the one for 0.5 shares common stock exchange and the par value of $0.0001.

KURA ONCOLOGY, INC.
Condensed Balance Sheets
(In thousands, except par value data)

	March 31, 2015 (Unaudited)	December 31, 2014
Assets		
Current assets:		
Cash	$ 53,571	$ 1,124
Accounts receivable, related party	349	30
Prepaid expenses	707	42
Total current assets	54,627	1,196
Property and equipment, net	34	27
Other long-term assets	150	150
Other long-term assets, related party	5	5
Total assets	$ 54,816	$ 1,378
Liabilities and Stockholders' Equity (Deficit)		
Current liabilities:		
Accounts payable and accrued expenses	$ 4,469	$ 846
Accounts payable, related party	1,062	134
Convertible notes payable, related party, current	—	2,036
Total current liabilities	5,531	3,016
Convertible notes payable, related party	—	493
Other long-term liabilities	391	1,295
Other long-term liabilities, related party	—	7
Total liabilities	5,922	4,811
Commitments and contingencies (Note 8)		
Stockholders' equity (deficit):		
Preferred stock, $0.0001 par value; 10,000 shares authorized, no shares issued and outstanding	—	—
Common stock, $0.0001 par value; 100,000 shares authorized; 14,508 and 4,944 shares issued; and 10,317 and 411 shares outstanding, excluding 4,191 and 4,533 shares subject to repurchase as of March 31, 2015 and December 31, 2014, respectively	1	—
Additional paid-in capital	57,040	238
Accumulated deficit	(8,147)	(3,671)
Total stockholders' equity (deficit)	48,894	(3,433)
Total liabilities and stockholders' equity (deficit)	$ 54,816	$ 1,378

See accompanying notes to condensed financial statements.

KURA ONCOLOGY, INC.
Condensed Statement of Operations and Comprehensive Loss
(In thousands, except per share data)
(Unaudited)

	Three Months Ended March 31, 2015
Operating Expenses:	
Research and development	$ 2,604
Research and development, related party	1,024
General and administrative	1,037
General and administrative, related party	23
Total operating expenses	4,688
Other Income (Expense):	
Management fee income, related party	300
Interest expense	(42)
Interest expense, related party	(46)
Total other income	212
Net loss and comprehensive loss	$ (4,476)
Net loss per share, basic and diluted	$ (1.41)
Weighted average number of shares used in computing net loss per share, basic and diluted	3,184

See accompanying notes to condensed financial statements.

KURA ONCOLOGY, INC.
Condensed Statement of Cash Flows
(In thousands)
(Unaudited)

	Three Months Ended March 31, 2015
Operating Activities	
Net loss	$ (4,476)
Adjustments to reconcile net loss to net cash used in operating activities:	
Share-based compensation expense	644
Non-cash license fee expense	500
Non-cash accrued interest expense	37
Non-cash accrued interest expense, related parties	41
Depreciation expense	3
Changes in operating assets and liabilities:	
Accounts receivable, related party	(318)
Prepaid expenses	(664)
Accounts payable and accrued expenses	90
Accounts payable, related party	927
Other liabilities	(907)
Net cash used in operating activities	(4,123)
Investing Activities	
Purchases of property and equipment	(10)
Net cash used in investing activities	(10)
Financing Activities	
Proceeds from issuance of common stock, net	51,580
Proceeds from issuance of convertible notes payable	5,000
Net cash provided by financing activities	56,580
Net increase in cash	52,447
Cash at beginning of period	1,124
Cash at end of period	$ 53,571
Supplemental disclosure of non-cash financing activities:	
Conversion of convertible notes and related accrued interest to common stock	$ 4,327
Conversion of convertible notes and related accrued interest to common stock, related party	$ 3,288
Financing costs included in accounts payable and accrued expenses	$ 3,535

See accompanying notes to condensed financial statements.

KURA ONCOLOGY, INC.
Notes to Condensed Financial Statements

1. Business and Organization

Kura Oncology, Inc. is a clinical stage biopharmaceutical company discovering and developing personalized therapeutics for the treatment of solid tumors and blood cancers. We focus on the development of small molecule product candidates that target cell signaling pathways that are important to driving the progression of certain cancers. We aim to employ molecular diagnostics to identify patients with cancers who are likely to benefit from our targeted product candidates.

References in these Notes to Financial Statements to the "Company" or "we", "our" or "us", refer to Kura Oncology, Inc., (Prior Kura), a private Delaware corporation incorporated in the State of Delaware in August 2014, for the periods prior to the Merger (as defined below) which took place on March 6, 2015, and Kura Oncology, Inc., a Delaware corporation incorporated in November 2007 and formerly known as Zeta Acquisition Corp. III, for the periods following the Merger.

Effective March 6, 2015 (Effective Time), we completed a reverse merger (the Merger) with a wholly owned subsidiary of "Zeta Acquisition Corp. III" (Zeta), a public shell company, leaving Prior Kura as the surviving entity. On March 31, 2015, the surviving entity merged with and into us. Zeta was formed in November 2007 with no specific business plan or purpose. As a result of the Merger and related transactions, Zeta changed its name to "Kura Oncology, Inc." and began operating Prior Kura's business.

Pursuant to the terms of the Merger Agreement, at the Effective Time, each share of Prior Kura common stock outstanding immediately prior to the Effective Time was exchanged for one-half (1/2) of a share of our common stock. We issued an aggregate of 14,508,177 shares of our common stock upon such exchange of the Prior Kura common stock outstanding. In addition, at the Effective Time, we assumed Prior Kura's 2014 Equity Incentive Plan that was in existence immediately prior to the Effective Time and concurrently approved the amendment and restatement of the Prior Kura 2014 Equity Incentive Plan pursuant to our 2014 Plan (2014 Plan), which became effective in April 2015. Refer to Note 9, Stockholders' Equity for detailed discussion on the 2014 Plan.

Immediately following the Effective Time, pursuant to the terms of a Redemption Agreement dated March 6, 2015 (the Redemption Agreement) by and among Zeta and its pre-Merger stockholders, we completed the closing of a redemption of 5,000,000 shares of our common stock (the Redemption) from our pre-Merger stockholders for consideration of $70,000, plus $30,000 in professional fees related to the transaction. The 5,000,000 shares constituted all of the issued and outstanding shares of Zeta's capital stock, on a fully-diluted basis, immediately prior to the Merger. Upon completion of the Merger and the Redemption, Prior Kura's stockholders held 100% of the outstanding shares of our capital stock.

Immediately prior to the Merger, on March 6, 2015, Prior Kura sold 16,561,396 shares of its common stock at a price of $3.16 per share, which was exchanged for 8,280,696 shares of our common stock in the Merger for gross proceeds of $52.3 million (the Financing). The Financing represented a qualified financing conversion event pursuant to Prior Kura's then-outstanding convertible promissory notes (the Notes). As such, upon the closing of the Financing, an aggregate of $7.5 million in principal under the Notes and $115,000 in accrued interest thereon through February 28, 2015 automatically converted into 2,409,740 shares of Prior Kura common stock, which was exchanged for 1,204,870 shares of our common stock in the Merger.

The Merger is accounted for as a reverse merger and a capital transaction. Prior Kura is the acquirer for accounting purposes and Zeta is the acquired company. Consequently, the assets and liabilities and the operations that are reflected in the historical financial statements prior to the Merger are those of Prior Kura and are recorded at Prior Kura's historical cost basis. Prior Kura was incorporated in August 2014; therefore, there were no operations in the periods prior to August 2014. The financial statements after completion of the Merger

include our assets, liabilities and operations. The historical equity accounts and awards of Prior Kura, including par value per share, share and per share numbers, have been retrospectively adjusted to reflect the one for 0.5 shares common stock exchange, the par value of $0.0001 and the number of shares received in the Merger.

2. Basis of Presentation

The accompanying unaudited condensed financial statements should be read in conjunction with our audited financial statements and notes thereto for the year ended December 31, 2014 included elsewhere in this prospectus from which we derived our balance sheet as of December 31, 2014. The accompanying financial statements have been prepared in accordance with US generally accepted accounting principles (GAAP) for interim financial information and with the instructions to Form S-1 and Article 10 of Regulation S-X. Accordingly, since they are interim statements, the accompanying financial statements do not include all of the information and notes required by GAAP for complete financial statements. The accompanying financial statements reflect all adjustments, consisting of normal recurring adjustments, that are, in the opinion of our management, necessary to a fair statement of the results for the interim periods presented. Interim results are not necessarily indicative of results for a full year.

The preparation of financial statements in accordance with GAAP requires our management to make estimates and assumptions that affect the amounts reported in our financial statements and accompanying notes. The amounts reported could differ under different estimates and assumptions. On an ongoing basis, we evaluate our estimates and judgments, which are based on historical and anticipated results and trends and on various other assumptions that management believes to be reasonable under the circumstances. By their nature, estimates are subject to an inherent degree of uncertainty and, as such, actual results may differ from management's estimates.

3. Summary of Significant Accounting Policies

Research and Development Expenses

Research and development expenses consist of salaries and other personnel costs, preclinical and clinical trial costs, manufacturing costs for non-commercial products and research and development facilities costs. All such costs are charged to research and development expense as incurred when these expenditures have no alternative future uses. Payments that we make in connection with in-licensed technology for a particular research and development project that have no alternative future uses (in other research and development projects or otherwise) and therefore no separate economic values are expensed as research and development costs at the time such costs are incurred. As of March 31, 2015, we have no in-licensed technologies that have alternative future uses in research and development projects or otherwise.

Share-Based Payments

Restricted stock awards are valued based on the fair value on the grant date. The fair value of restricted stock awards expected to vest is recognized on a straight-line basis over the requisite service period of the award. Estimated fair value of the restricted stock awards granted to non-employees is recorded on the earlier of the performance commitment date or the date the services required are completed and are remeasured at fair value during the service period.

Our equity incentive plan allows for the issuance of restricted stock awards to employees and non-employee consultants that may be subject to vesting. The unvested shares of any restricted stock awards are held in escrow as the stock award vests or until award holder termination, whichever occurs first. In the event of a termination, we have the right of repurchase, at our option, for the portion of unvested stock awards from the terminated award holder. The repurchase price for unvested stock awards will be the lower of (i) the fair market value of the shares of common stock on the date of repurchase or (ii) their original purchase price. For all unvested stock awards, a liability is established related to the cash received for the unvested portion of the stock award, which represents our obligation if all award holders were to be terminated, and is recorded within other long-term liabilities on the accompanying Balance Sheets.

Comprehensive Loss

Comprehensive loss is defined as the change in equity during the period from transactions and other events and non-owner sources, including unrealized losses on investments. Net loss and comprehensive loss were the same for the period presented, therefore, a separate statement of comprehensive loss is not included in the accompanying financial statements.

Segment Reporting

We operate in a single industry segment which is the discovery and development of personalized therapeutics for the treatment of solid tumors and blood cancers. Our chief operating decision-maker reviews the operating results on an aggregate basis and manages the operations as a single operating segment.

Fair Value Measurements

Fair value is defined as the exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

- Level 1-Quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2-Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable; and
- Level 3-Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

As of March 31, 2015 and December 31, 2014, we did not have financial assets that are measured at fair value on a recurring basis. The carrying amounts of our financial instruments, which include cash, prepaid expenses, accounts payable, accrued expenses and all related party amounts approximate their fair values at March 31, 2015 and December 31, 2014, primarily due to their short-term nature. No transfers between levels have occurred during the periods presented.

Our license agreement with The Regents of the University of California San Francisco (UCSF), which was amended in April 2015, provides for an indexed milestone payment upon the occurrence of a qualified financing and a subsequent initial public offering or a change of control event, as defined in the agreement. The indexed milestone was determined to qualify as an embedded derivative liability requiring an estimate of fair value. The UCSF derivative liability measured at fair value (Level 3) on a recurring basis was $293,000 and $196,000 as of March 31, 2015 and December 31, 2014, respectively.

We estimate the fair value of our derivative liabilities at the time of issuance and subsequent remeasurement at each reporting date using a probability model that considers the probability of achieving the events that would trigger such liabilities and the estimated time period the liabilities would be outstanding. The estimates are based, in part, on subjective assumptions and could differ materially in the future. Changes to these assumptions can have a significant impact on the fair value of the derivative liabilities.

	Derivative Liabilities (In thousands)
Balance at December 31, 2014	$ 196
Issuance of derivative liability	—
Change in fair value(1)	97
Balance at March 31, 2015	$ 293

(1) The amount is included within research and development expenses on our Statement of Operations and Comprehensive Loss.

Net Loss per Share

We calculated basic net loss per share by dividing the net loss by the weighted-average number of common shares outstanding for the period, without consideration for common stock equivalents. Diluted net loss per share is calculated by dividing the net loss by the weighted-average number of common share equivalents outstanding for the period determined using the treasury-stock method. Dilutive common stock equivalents are comprised of unvested restricted stock awards outstanding under our equity plan. For all periods presented, there is no difference in the number of shares used to calculate basic and diluted shares outstanding due to the antidilutive effect of the securities. Potentially dilutive securities, which includes unvested stock awards of 4,191,081 are excluded from the calculation of diluted net loss per share for the three months ended March 31, 2015 due to the anti-dilutive effect of the securities.

4. Property and equipment, net

Property and equipment consisted of the following, in thousands:

	March 31, 2015	December 31, 2014
Computer equipment	$ 31	$ 26
Software	7	2
	38	28
Less: accumulated depreciation	(4)	(1)
Property and equipment, net	$ 34	$ 27

5. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities consisted of the following, in thousands:

	March 31, 2015	December 31, 2014
Accounts payable	$ 3,612	$ 226
Accrued expenses	781	581
Accrued compensation and benefits	76	39
Total accounts payable and accrued expenses	$ 4,469	$ 846

6. Notes Payable

Araxes Convertible Note

In October 2014, we entered into a Note Purchase Agreement and Convertible Promissory Note with an affiliated company Araxes Pharma LLC (Araxes) under which Araxes provided a $2.0 million loan in the form of a convertible promissory note. As a result of the Financing, the total of unpaid principal and accrued interest as of February 28, 2015 was automatically converted into 326,443 shares of our common stock (as adjusted for the exchange in the Merger).

Araxes Asset Purchase Agreement—Convertible Note

As consideration for the patents acquired under the Araxes Asset Purchase Agreement entered into in December 2014, Araxes issued a convertible promissory note equal to the purchase price of the patent rights of $500,000. As a result of the Financing, the total of unpaid principal and accrued interest as of February 28, 2015 was automatically converted into 80,293 shares of our common stock (as adjusted for the exchange in the Merger).

January 2015 Convertible Notes

In January 2015, we entered into a Note Purchase Agreement and Convertible Promissory Note for a $3.0 million loan with various persons and entities named within the agreement (the Holders), of which $710,000 were with certain officers and certain officers' related parties. As a result of the Financing, the total of unpaid principal and accrued interest as of February 28, 2015 was automatically converted into 479,667 shares of our common stock (as adjusted for the exchange in the Merger).

JJDC Convertible Note

In accordance with the license agreement with Janssen Pharmaceutica NV (Janssen), a foreign entity headquartered in Belgium and an affiliate of Johnson & Johnson, Inc., in January 2015 we entered into a Convertible Promissory Note with Janssen's affiliated company, Johnson & Johnson Innovation —JJDC, Inc. (JJDC) for $1.0 million. As a result of the Financing, the total of unpaid principal and accrued interest as of February 28, 2015 was automatically converted into 159,615 shares of our common stock (as adjusted for the exchange in the Merger).

February 2015 Convertible Notes

In February 2015, we entered into a Note Purchase Agreement and Convertible Promissory Note with entities named within the agreement (the February Note Holders) under which the February Note Holders provided a $1.0 million loan in the form of convertible promissory notes. As a result of the Financing, the total of unpaid principal and accrued interest as of February 28, 2015 was automatically converted into 158,852 shares of our common stock (as adjusted for the exchange in the Merger).

7. License Agreements

License Agreement with The University of Michigan

In December 2014, we entered into a license agreement with The Regents of The University of Michigan (Michigan), which was amended in March 2015, under which we received certain license rights for a non-refundable upfront license, annual maintenance fees and payments upon achievement of certain development and sales-based milestones. The licensed asset consists of a number of compounds, which are in the lead discovery/lead optimization phase. All future development, regulatory and commercial work on the asset will be completed fully and at our sole expense. Michigan retains the right to use the asset for non-commercial research, internal and/or educational purposes, with the right to grant the same limited rights to other non-profit research institutions. Furthermore, the agreement stipulates contingent consideration for the issuance of shares equivalent to a set dollar value upon the occurrence of a qualified financing or a change of control event, as defined in the amendment to the agreement, consistent with the terms issued to any future investors or the per share consideration to be received by other shareholders. As a result of the Financing, we issued 79,113 shares of our common stock (as adjusted for the exchange in the Merger) at a fair value of $500,000, which was recognized as research and development expense during the three months ended March 31, 2015.

The agreement will terminate upon the last-to-expire patent rights, or may be terminated by us at any time with 90 days written notice of termination or terminated by Michigan upon a bankruptcy by us, payment failure by us that is not cured within 30 days or a material breach of the agreement by us that is not cured within 60 days.

Sponsored Research Agreement with The University of Michigan

In February 2015, we entered into a Sponsored Research Agreement with Michigan under which we will sponsor up to $2.7 million of research at Michigan over a three-year period. We will receive a non-exclusive right to any technology developed under this agreement and have an option right for an exclusive right to any

such licenses developed under the agreement. The Sponsored Research Agreement allows for termination with notice at any time by us. In the event of termination by us prior to the second anniversary of the agreement, other than due to breach by Michigan, we will be required to pay costs budgeted through the second anniversary up to $2.0 million of the sponsored research amount. Any costs incurred for the Sponsored Research Agreement will be expensed as incurred. For the three months ended March 31, 2015, we recorded $125,000 in research and development expense under this research agreement.

Collectively, our outstanding license agreements provide for specified development, regulatory and sales-based milestone payments up to a total of $81.7 million payable upon occurrence of each stated event, of which $1.2 million relates to the initiation of certain development activities, $30.5 million relates to the achievement of specified regulatory approvals for the first indication and up to $50.0 million for the achievement of specified levels of product sales. Additional payments will be due for each subsequent indication if specified regulatory approvals are achieved. All milestone payments under the agreements will be recognized as research and development expense upon completion of the required events because the triggering events are not considered to be probable until they are achieved. As of March 31, 2015, we have not achieved any milestones under the agreements. Furthermore, if all the programs are successfully commercialized, we will be required to pay tiered royalties on annual net product sales ranging from the low single digits to the low teens, depending on the volume of sales and the respective agreement.

8. Commitments and Contingencies

From time to time, we may be involved in disputes, including litigation, relating to claims arising out of operations in the normal course of our business. Any of these claims could subject us to costly legal expenses and, while we generally believe that we have adequate insurance to cover many different types of liabilities, our insurance carriers may deny coverage or our policy limits may be inadequate to fully satisfy any damage awards or settlements. If this were to happen, the payment of any such awards could have a material adverse effect on our results of operations and financial position. Additionally, any such claims, whether or not successful, could damage our reputation and business. We currently are not a party to any legal proceedings, the adverse outcome of which, in management's opinion, individually or in the aggregate, would have a material adverse effect on our results of operations or financial position.

9. Stockholders' Equity

Common Stock

Immediately prior to the Merger, on March 6, 2015, Prior Kura sold 16,561,396 shares of its common stock at a price of $3.16 per share, which were exchanged for 8,280,696 shares of our common stock in connection with the Merger, for net proceeds of $48.6 million, net of $3.7 million in fees. The Financing represented a qualified financing conversion event pursuant to the Notes. As such, upon the closing of the Financing, an aggregate of $7.5 million in principal under the Notes and $115,000 in accrued interest through February 28, 2015 automatically converted into 2,409,740 shares of Prior Kura common stock, which was exchanged for 1,204,870 shares of our common stock in the Merger. In addition, we incurred approximately $564,000 in costs related to the Merger which were accounted for as financing costs in additional paid-in capital.

Effective April 13, 2015, pursuant to our amended and restated certificate of incorporation, we have authorized capital stock consisting of 200,000,000 shares of common stock, par value $0.0001 per share, and 10,000,000 shares of preferred stock, par value $0.0001 per share.

Restricted Stock Awards

In August 2014, Prior Kura adopted the Prior Kura 2014 Equity Incentive Plan. In connection with the Merger as discussed in Note 1, at the Effective Time of the Merger, we adopted the Prior Kura 2014 Equity Incentive Plan and approved the amendment and restatement of the Prior Kura 2014 Equity Incentive Plan

pursuant to the 2014 Plan, which became effective April 13, 2015. Under the 2014 Plan, a total of 5,975,000 shares are reserved for issuance. The 2014 Plan provides equity-based incentives in the form of stock awards to employees and other providers of services to us. The 2014 Plan provides for the grant of incentive stock options, non-statutory stock options, restricted stock awards, restricted stock unit awards, performance-based stock awards and other forms of equity compensation to eligible recipients. Recipients of incentive stock options shall be eligible to purchase shares of our common stock at an exercise price equal to no less than the estimated fair market value of such stock on the date of grant. The maximum term of options to be granted under the Plan is ten years. No options have been granted under the plan as of March 31, 2015.

Restricted stock awards were granted at a price equal to the estimated fair market value on the date of grant. The restricted stock awards generally vest over four years from the original vesting date, with certain grants subject to one-year cliff vesting. The vesting provisions of individual awards may vary as approved by our Board of Directors. In connection with the issuance of restricted common stock, we maintain a repurchase right where shares of restricted common stock are released from such repurchase right over a period of time of continued service by the recipient.

The following is a summary of restricted share activity, in thousands (except per share data):

	Number of Shares	Weighted Average Grant Date Fair Value
Balance at December 31, 2014	4,533	$ 0.002
Granted	—	
Vested	(342)	
Unvested at March 31, 2015	4,191	$ 0.002
Vested at March 31, 2015	752	$ 0.002

As of March 31, 2015, there were 4,191,081 shares subject to repurchase, of which 3,530,403 and 660,678 shares were related to employee and non-employee awards, respectively. There were 1,031,500 shares of common stock reserved for future stock awards under the 2014 Plan. For the three months ended March 31, 2015, 243,513 and 98,280 shares underlying restricted stock awards granted to employees and non-employees, respectively, vested. As of March 31, 2015, 565,597 and 186,822 shares underlying restricted stock awards granted to employees and non-employees, respectively, were vested. For the three months ended March 31, 2015, we recognized share-based compensation expense totaling $644,000, of which $616,000 related to non-employee awards. In addition, $603,000 of the share-based compensation expense was charged to research and development expenses and $41,000 to general and administrative expenses.

10. Related Party Transactions

As discussed in Note 6, in January 2015, we entered into a Note Purchase Agreement and Convertible Promissory Note for a $3.0 million loan with various persons and entities named within the agreement (the Holders), of which $710,000 were with certain officers and certain officers' related parties. As a result of the Financing, the total of unpaid principal and accrued interest as of February 28, 2015 was automatically converted into 479,667 shares of our common stock (as adjusted for the exchange in the Merger).

Our president and chief executive officer is also the managing member of our affiliated company Araxes. Four individuals are significant stockholders of each of us and Araxes. The following is a summary of all transactions with Araxes for the three months ended March 31, 2015.

Convertible Promissory Notes

As described in Note 6, as a result of the Financing, the total of unpaid principal and accrued interest as of February 28, 2015 for the convertible note payable to Araxes was automatically converted into 326,443 shares of our common stock (as adjusted for the exchange in the Merger). In addition, the total of unpaid principal and

accrued interest as of February 28, 2015 for the convertible note payable related to the Araxes asset purchase was automatically converted into 80,293 shares of our common stock (as adjusted for the exchange in the Merger).

Facility Sublease

We sublease office space from Araxes for a base monthly rent of approximately $5,000 per month plus operating expenses, taxes, insurance, and utilities applicable to the subleased property. Rent expense related to this sublease for the three months ended March 31, 2015 was $25,000. The sublease will expire on August 30, 2016.

Management Fees

We have a management services agreement with Araxes under which Araxes pays us a fixed $100,000 a month for management services. In addition, the agreement allows for Araxes to pay us an amount equal to the number of full time equivalents (FTE) performing collaboration services for Araxes, at an annual FTE rate of $350,000, plus actual expenses as reasonably incurred. The agreement has an initial term expiring on December 31, 2015 and renews automatically for additional consecutive one-year periods. The agreement may be terminated by either party with a notice of at least 30 days prior to December 31, 2015 or the expiration of the then-renewal term.

Services Agreement

We have a services agreement with Wellspring Biosciences LLC (a wholly owned subsidiary of Araxes) which allows for payment of research and development services provided to us of an amount equal to the number of FTE's performing the services, at an annual FTE rate of $400,000, plus actual expenses as reasonably incurred. This services agreement has an initial term expiring on December 31, 2015 and renews automatically for additional consecutive one-year periods. The agreement may be terminated by either party with a notice of at least 30 days prior to December 31, 2015 or the expiration of the then-renewal term.

11. Subsequent Events

On May 12, 2015, we entered into an amendment to the executive employment agreements (the First Amendment to Executive Employment Agreements) with each of Troy Wilson, our President and Chief Executive Officer, and Heidi Henson, our Chief Financial Officer. Each First Amendment to Executive Employment Agreement provides that the merger transaction between us and our former wholly owned subsidiary, effective March 31, 2015, did not qualify as a Corporate Transaction as such term is defined in the executive employment agreements.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the fees and expenses to be incurred in connection with the registration of the securities being registered hereby, all of which will be borne by us. Except for the SEC registration fee, all amounts are estimates.

Description	Amount
SEC registration fee	$ 10,487
Printing expense	50,000
Accounting fees and expenses	125,000
Legal fees and expenses	150,000
Miscellaneous fees and expenses	14,513
Total expenses	$350,000

Item 14. Indemnification of Directors and Officers

We are incorporated under the laws of the State of Delaware. Section 145 of the Delaware General Corporation Law provides that a Delaware corporation may indemnify any persons who were, are, or are threatened to be made, parties to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person is or was an officer, director, employee or agent of such corporation, or is or was serving at the request of such corporation as an officer, director, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided that such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was illegal. A Delaware corporation may indemnify any persons who were, are, or are threatened to be made, a party to any threatened, pending or completed action or suit by or in the right of the corporation by reason of the fact that such person is or was a director, officer, employee or agent of such corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit provided such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him or her against the expenses (including attorneys' fees) actually and reasonably incurred.

Our amended and restated certificate of incorporation and amended and restated bylaws provide for the indemnification of its directors and officers to the fullest extent permitted under the Delaware General Corporation Law.

Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duties as a director, except for liability for any:

- transaction from which the director derives an improper personal benefit;
- act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

- unlawful payment of dividends or redemption of shares; or
- breach of a director's duty of loyalty to the corporation or its stockholders.

Our amended and restated certificate of incorporation includes such a provision. Expenses incurred by any officer or director in defending any such action, suit or proceeding in advance of its final disposition shall be paid by us upon delivery to us of an undertaking, by or on behalf of such director or officer, to repay all amounts so advanced if it shall ultimately be determined that such director or officer is not entitled to be indemnified by us.

Section 174 of the Delaware General Corporation Law provides, among other things, that a director who willfully or negligently approves of an unlawful payment of dividends or an unlawful stock purchase or redemption may be held liable for such actions. A director who was either absent when the unlawful actions were approved, or dissented at the time, may avoid liability by causing his or her dissent to such actions to be entered in the books containing minutes of the meetings of the board of directors at the time such action occurred or immediately after such absent director receives notice of the unlawful acts.

As permitted by the Delaware General Corporation Law, we have entered into indemnity agreements with each of our directors and executive officers, that require us to indemnify such persons against any and all costs and expenses (including attorneys', witness or other professional fees) actually and reasonably incurred by such person in connection with any action, suit or proceeding (including derivative actions), whether actual or threatened, to which any such person may be made a party by reason of the fact that such person is or was a director or officer or is or was acting or serving as an officer, director, employee or agent of us or any of our affiliated enterprises, provided that such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to our best interests and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. The indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder.

At present, there is no pending litigation or proceeding involving any of our directors or executive officers as to which indemnification is required or permitted, and we are not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

We have an insurance policy in place that covers our officers and directors with respect to certain liabilities, including liabilities arising under the Securities Act of 1933, as amended, or the Securities Act, or otherwise.

Reference is made to the following documents listed as exhibits to this registration statement regarding relevant indemnification provisions described above and elsewhere herein:

Exhibit Document	Number
Amended and Restated Certificate of Incorporation.	3.1
Amended and Restated Bylaws.	3.4
Form of Indemnification Agreement.	10.4

Item 15. Recent Sales of Unregistered Securities

Set forth below is information regarding shares of common stock and convertible notes issued by us and by Prior Kura within the past three years that were not registered under the Securities Act. Also included is the consideration, if any, received by us and by Prior Kura for such shares and notes and information relating to the section of the Securities Act, or rule of the Securities and Exchange Commission, under which exemption from registration was claimed. The number of shares issued prior to the Merger described below in paragraphs A, C and D below do not reflect the exchange of shares in the Merger, which is further described in paragraph E below.

Original Issuances of Stock and Convertible Notes

A. From August 29, 2014 until the Merger, Prior Kura issued an aggregate of 9,887,000 shares of Prior Kura restricted common stock to certain founders, employees, consultants and investors for aggregate consideration of $14,000.

B. From October 8, 2014 until the Merger, Prior Kura issued convertible promissory notes having an aggregate principal amount of $7.5 million to certain investors. In connection with the Private Placement described in paragraph D below, the principal amount of all outstanding convertible promissory notes, plus accrued interest, converted into Prior Kura common stock on March 6, 2015.

C. On March 6, 2015, immediately prior to the Effective Time, Prior Kura issued 18,971,136 shares of its common stock at a price of $3.16 per share (as adjusted to $6.32 per share after giving effect to the Merger), or an aggregate purchase price of approximately $60.0 million, which included approximately $7.5 million in principal and $0.1 million in accrued interest from the conversion of Prior Kura's then outstanding convertible promissory notes, to investors in the Private Placement. As part of the Private Placement, all outstanding convertible promissory notes, plus accrued interest thereon, described in paragraph B above, were converted into shares of Prior Kura common stock at a price of $3.16 per share (as adjusted to $6.32 per share after giving effect to the Merger). Leerink Partners LLC acted as sole lead placement agent and National Securities Corporation and Livingston Securities LLC acted as co-agents for purposes of the sale of Prior Kura common stock in the Private Placement. Entities affiliated with Leerink Partners LLC purchased an aggregate of 317,704 shares of Prior Kura common stock in the Private Placement on the same terms as the other investors through the conversion of convertible promissory notes.

D. On March 6, 2015, concurrently with the Private Placement, Prior Kura issued an aggregate of 158,226 shares of its common stock as partial consideration for its license agreement, as amended, with the University of Michigan.

E. On March 6, 2015, at the Effective Time, each share of Prior Kura common stock that was issued and outstanding immediately prior to the Effective Time was automatically exchanged for 0.5 shares of our common stock. We issued an aggregate of 14,508,177 shares of our common stock upon such exchange of the outstanding shares of Prior Kura common stock to Prior Kura's stockholders immediately prior to the Effective Time, which included no more than 35 non-accredited investors. In addition, at the Effective Time, we assumed the Kura 2014 Equity Incentive Plan.

Securities Act Exemptions

The offers, sales and issuances of the securities described in paragraph A above were deemed to be exempt from registration pursuant to either Rule 701 promulgated under the Securities Act as transactions pursuant to compensatory benefit plans or pursuant to Section 4(2) of the Securities Act as transactions by an issuer not involving a public offering. The shares of common stock issued upon the exercise of options are deemed to be restricted securities for purposes of the Securities Act.

The offers, sales and issuances of the securities described in paragraphs B, C, D and E above were deemed to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act (or Regulation D promulgated thereunder) as transactions by an issuer not involving a public offering. The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions was an accredited investor within the meaning of Rule 501 of Regulation D under the Securities Act and had adequate access, through employment, business or other relationships, to information about the registrant.

Item 16. Exhibits and Financial Statement Schedules

(a) See the Exhibit Index on the page immediately following the signature page for a list of exhibits filed as part of this registration statement on Form S-1, which Exhibit Index is incorporated herein by reference.

(b) Financial Statement Schedules

Financial Statement Schedules are omitted because the information is included in our financial statements or notes to those financial statements.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or any decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low end or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new Registration Statement relating to the securities to be offered therein, and the offering of such securities at that time shall be deemed to be an initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which shall remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser: each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such

liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act, and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this Amendment No. 2 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of La Jolla, State of California, on July 2, 2015.

KURA ONCOLOGY, INC.

By: /s/ Troy E. Wilson, Ph.D., J.D.
Troy E. Wilson, Ph.D., J.D.
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Troy E. Wilson, Ph.D., J.D. Troy E. Wilson, Ph.D., J.D.	President, Chief Executive Officer and Chairman of the Board of Directors *(Principal Executive Officer)*	July 2, 2015
/s/ Heidi Henson Heidi Henson	Chief Financial Officer and Secretary *(Principal Financial Officer and Principal Accounting Officer)*	July 2, 2015
/s/ Faheem Hasnain* Faheem Hasnain	Director	July 2, 2015
/s/ Robert E. Hoffman* Robert E. Hoffman	Director	July 2, 2015

* Pursuant to power of attorney

By: /s/ Heidi Henson
Heidi Henson
Attorney-in-fact

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EXHIBIT INDEX

Exhibit Number	Description
2.1(1)	Agreement and Plan of Merger, dated March 6, 2015, by and among the Registrant, Kura Operations, Inc. and Kura Oncology, Inc.
2.2(2)	Agreement and Plan of Merger, dated March 6, 2015, by and between the Registrant and Kura Oncology, Inc., relating to the name change of the Registrant.
3.1(3)	Amended and Restated Certificate of Incorporation of the Registrant.
3.2(4)	Certificate of Merger relating to the Merger of Kura Operations, Inc. with and into Kura Oncology, Inc., filed with the Secretary of State of the State of Delaware on March 6, 2015.
3.3(5)	Certificate of Ownership and Merger relating to the merger of Kura Oncology, Inc. with and into the Registrant, filed with the Secretary of State of the State of Delaware on March 6, 2015, relating to the name change of the Registrant.
3.4(6)	Amended and Restated Bylaws of the Registrant.
4.1(7)	Form of Common Stock certificate.
4.2(8)	Registration Rights Agreement, dated as of March 6, 2015, by and among Kura Oncology, Inc. and the Investors listed on Schedule A thereto.
5.1(9)	Opinion of Cooley LLP.
10.1+(10)	Kura Oncology, Inc. Amended and Restated 2014 Equity Incentive Plan and Forms of Stock Option Agreement, Notice of Exercise and Stock Option Grant Notice thereunder.
10.2+(11)	Form of Restricted Stock Purchase Agreement and Restricted Stock Purchase Award Notice under the Kura Oncology, Inc. Amended and Restated 2014 Equity Incentive Plan.
10.3+(12)	Kura Oncology, Inc. 2015 Employee Stock Purchase Plan.
10.4+(13)	Form of Indemnification Agreement by and between the Registrant and each of its directors and officers.
10.5+(14)	Executive Employment Agreement, effective as of October 1, 2014, by and between the Registrant and Troy Wilson, Ph.D., J.D.
10.6*(15)	License Agreement, dated December 18, 2014, by and between the Registrant and Janssen Pharmaceutica NV.
10.7*(16)	Asset Purchase Agreement, dated December 23, 2014, by and between the Registrant and Araxes Pharma LLC.
10.8(17)	Sublease, dated August 29, 2014, by and between the Registrant and Wellspring Biosciences LLC.
10.9(18)	First Amendment to Sublease, dated December 18, 2014, by and between the Registrant and Wellspring Biosciences LLC.
10.10(19)	Redemption Agreement dated as of March 6, 2015 by and between the Registrant and stockholders of the Registrant listed therein.
10.11(20)	Indemnity Agreement dated as of March 6, 2015 by and among the Registrant, Kura Oncology, Inc. and each of John Pappajohn and Matthew P. Kinley.
10.12+(21)	Kura Oncology, Inc. Non-Employee Director Compensation Policy.
10.13*(22)	Services Agreement, effective as of October 1, 2014, by and between the Registrant and Wellspring Biosciences LLC.
10.14*(23)	Management Services Agreement, effective as of October 1, 2014, by and between the Registrant and Araxes Pharma LLC.
16.1(24)	Letter from LWBJ, LLP to the Securities and Exchange Commission, dated April 17, 2015.
23.1	Consent of Independent Registered Public Accounting Firm.

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Exhibit Number	Description
23.2(25)	Consent of Cooley LLP.
24.1(26)	Power of Attorney.
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

+ Indicates management contract or compensatory plan.

* Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission, or SEC.

(1) Previously filed as Exhibit 2.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.

(2) Previously filed as Exhibit 2.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.

(3) Previously filed as Exhibit 3.1 to the Registrant's Registration Statement on Form S-1, filed with the SEC on April 17, 2015, and incorporated herein by reference.

(4) Previously filed as Exhibit 3.3 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.

(5) Previously filed as Exhibit 3.4 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.

(6) Previously filed as Exhibit 3.5 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.

(7) Previously filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.

(8) Previously filed as Exhibit 4.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.

(9) Previously filed as Exhibit 5.1 to the Registrant's Registration Statement on Form S-1, filed with the SEC on April 17, 2015, and incorporated herein by reference.

(10) Previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.

(11) Previously filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.

(12) Previously filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.

(13) Previously filed as Exhibit 10.4 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.

(14) Previously filed as Exhibit 10.5 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.
(15) Previously filed as Exhibit 10.6 to the Registrant's Current Report on Form 8-K/A, filed with the SEC on July 2, 2015, and incorporated herein by reference.
(16) Previously filed as Exhibit 10.7 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.
(17) Previously filed as Exhibit 10.8 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.
(18) Previously filed as Exhibit 10.9 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.
(19) Previously filed as Exhibit 10.10 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.
(20) Previously filed as Exhibit 10.11 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 12, 2015 (containing Items 1.01, 2.01, 3.02, 4.01, 5.01, 5.02, 5.03, 5.06 and 9.01), and incorporated herein by reference.
(21) Previously filed as Exhibit 10.12 to the Registrant's Registration Statement on Form S-1, filed with the SEC on April 17, 2015, and incorporated herein by reference.
(22) Previously filed as Exhibit 10.13 to the Registrant's Amendment No. 1 to Registration Statement on Form S-1, filed with the SEC on June 2, 2015, and incorporated herein by reference.
(23) Previously filed as Exhibit 10.14 to the Registrant's Amendment No. 1 to Registration Statement on Form S-1, filed with the SEC on June 2, 2015, and incorporated herein by reference.
(24) Previously filed as Exhibit 16.1 to the Registrant's Registration Statement on Form S-1, filed with the SEC on April 17, 2015, and incorporated herein by reference.
(25) Previously filed as Exhibit 23.3 to the Registrant's Registration Statement on Form S-1, filed with the SEC on April 17, 2015, and incorporated herein by reference.
(26) Previously filed as Exhibit 24.1 to the Registrant's Registration Statement on Form S-1, filed with the SEC on April 17, 2015, and as Exhibit 24.2 to the Registrant's Amendment No. 1 to Registration Statement on Form S-1, filed with the SEC on June 2, 2015, and each of which is incorporated herein by reference.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the reference to our firm under the captions “Experts”, “Changes in and Disagreements with Accountants on Accounting and Financial Disclosure”, and to the use of our report dated March 12, 2015, except for the common stock exchange described in paragraph 11 of Note 13, as to which the date is July 2, 2015, in Amendment No. 2 to the Registration Statement (Form S-1 No. 333-203503) and related Prospectus of Kura Oncology, Inc. for the registration of 14,279,820 shares of its common stock.

/s/ Ernst & Young LLP

San Diego, California
July 2, 2015