

PROSPECTUS



13,947,599 Shares of Common Stock

This prospectus relates to the offering and resale by the selling stockholders identified herein of up to 13,947,599 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 11. We have borne and will continue to bear the costs relating to the registration of these shares.

Our common stock is listed on the NASDAQ Global Select Market under the symbol “KURA.” On April 13, 2016, the last reported sale price of our common stock on the NASDAQ Global Select Market was \$3.51 per share. 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 7 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 April 14, 2016

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ABOUT THIS PROSPECTUS

You should rely only on the information contained in this prospectus, incorporated by reference 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 or incorporated by reference in this prospectus. 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, and the information we have incorporated by reference in this prospectus is accurate only as of the date of the document incorporated by reference. Our business, financial condition, results of operations and prospects may have changed since that such dates. You should read both this prospectus and any prospectus supplement together with additional information under the headings “Where You Can Find More Information” and “Information Incorporated by Reference.” To the extent there are inconsistencies between any prospectus supplement, this prospectus and any documents incorporated by reference, the document with the most recent date will control.

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 or incorporated by reference 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, and the information incorporated by reference in this 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 that are incorporated by reference in this prospectus.

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 derive the most benefit. 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.

We are developing our lead product candidate, tipifarnib, a farnesyl transferase inhibitor, in both solid tumors and blood cancers based on previously generated clinical data, preclinical data as well as our identification of potential molecular biomarkers. We in-licensed tipifarnib from Janssen Pharmaceutica NV, a foreign entity headquartered in Belgium and an affiliate of Johnson & Johnson, in December 2014. We initiated a Phase 2 clinical trial of tipifarnib in patients who have solid tumors with Harvey rat sarcoma viral oncogene homolog, or HRAS, mutations in May 2015, and a Phase 2 clinical trial in patients with peripheral T-cell lymphoma in September 2015. We plan to initiate a Phase 2 clinical trial in patients with lower risk myelodysplastic syndromes in the second quarter of 2016. Tipifarnib is also currently being evaluated in an investigator sponsored Phase 2 clinical trial in patients with advanced, previously treated urothelial carcinomas that carry HRAS mutations.

Our pipeline also includes two preclinical programs. We are advancing KO-947, a small molecule inhibitor of extracellular-signal-regulated kinase as a potential treatment for patients with tumors that have mutations in or other dysregulation of the mitogen-activated protein kinase signaling pathway, including pancreatic cancer, colorectal cancer, non-small cell lung cancer and melanoma. We anticipate submitting an investigational new drug application for KO-947 to the Food and Drug Administration in the second quarter of 2016 and commencing a Phase 1 clinical trial in the second half of 2016. We are also developing orally available, small molecule inhibitors of the menin-mixed lineage leukemia, or menin-MLL, fusion protein 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 gene. Our goal is to nominate a development candidate for our menin-MLL program in the second half of 2016.

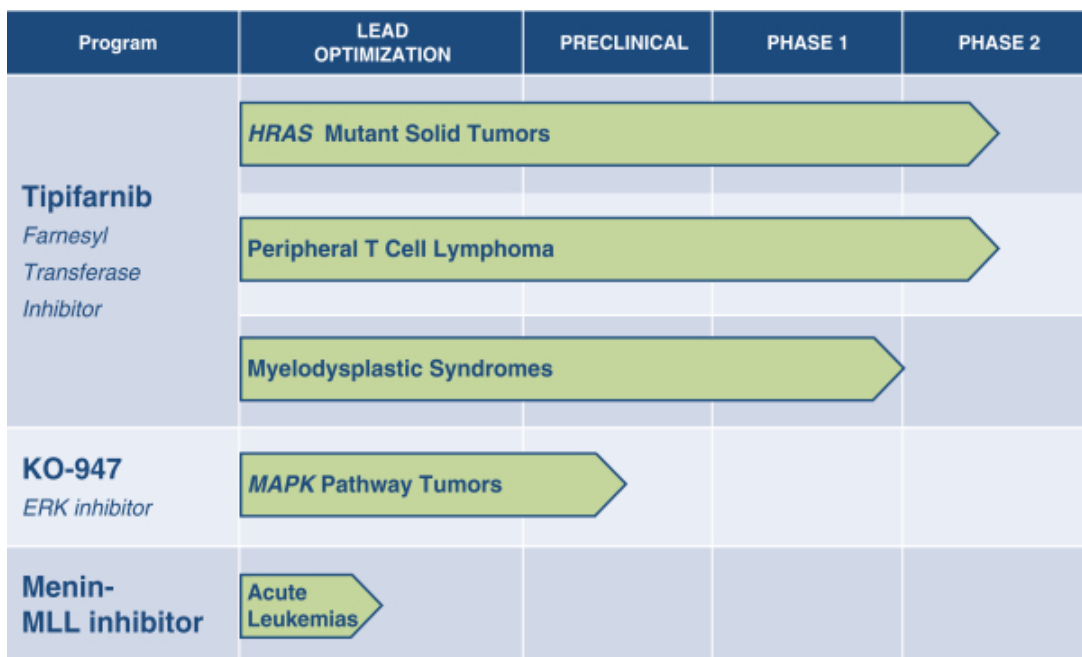
Strategy

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

- Focus on developing novel treatments for cancer;
- Leverage companion diagnostics to identify subsets of patients more likely to benefit from our product candidates;
- Prioritize development of tipifarnib in clinical indications where improved outcomes are associated with specific biomarkers;
- Advance our pre-clinical programs into clinical proof-of-concept studies through a combination of internal development and strategic partnerships;
- Maintain significant development and commercial rights to our product candidates; and
- Build a sustainable product pipeline.

Clinical Programs and Pipeline

The following table summarizes our current product pipeline:



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:

- being required to provide only two years of audited financial statements in addition to any required unaudited interim financial statements, with correspondingly reduced disclosure in the “Management’s

Discussion and Analysis of Financial Condition and Results of Operations” section of our periodic reports and registration statements;

- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes- Oxley Act of 2002;
- 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 until the last day of the fiscal year following the fifth anniversary of our November 2015 public offering. 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 in our periodic reports, proxy statements and registration statements, 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.

Reverse Merger

On March 6, 2015, Zeta Acquisition Corp. III, or Zeta, completed a reverse merger transaction in which Kura Operations, Inc., a Delaware corporation and wholly-owned subsidiary of Zeta, merged with and into Kura Oncology, Inc., a Delaware corporation, which we refer to as Prior Kura, with Prior Kura remaining as the surviving entity and a wholly-owned operating subsidiary of Zeta. This transaction is referred to throughout this prospectus as the “Merger.” In the Merger, each outstanding share of Prior Kura common stock was exchanged for 0.5 shares of our common stock, which we refer to as the Exchange. Following the Merger and the redemption of all of our then outstanding shares at the closing of the Merger, the former stockholders of Prior Kura owned 100% of the outstanding shares of our capital stock. In connection with the Merger, Prior Kura changed its name to “Kura Operations, Inc.” and we changed our name to “Kura Oncology, Inc.” In addition, on March 31, 2015, Kura Operations, Inc. merged with and into us and we continued as the surviving entity.

Public Offering

In November 2015, we completed a public offering in which we sold an aggregate of 6,883,467 shares of common stock at a price of \$8.00 per share. The net proceeds from the public offering, after deducting underwriting discounts, commissions and offering expenses, were approximately \$50.3 million.

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 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. In connection with the Merger, Kura Operations, Inc., a wholly-owned subsidiary of Zeta, merged with and into Prior Kura, and Prior Kura continued as the operating subsidiary of Zeta, changing 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.

Our corporate headquarters are located at 11119 North Torrey Pines Road, Suite 125, La Jolla, California 92037, and our telephone number is (858) 500-8800. We also occupy 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	13,947,599 shares
Common stock outstanding	21,370,560 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 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.
NASDAQ Global Select Market symbol	KURA

The number of shares of common stock outstanding is based on an aggregate of 21,370,560 shares outstanding as of March 31, 2016, and excludes:

- 1,193,275 shares of common stock issuable upon the exercise of outstanding stock options, at a weighted average exercise price of \$6.73 per share;
- 714,131 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
- 238,705 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.

All share and per share figures reflect the Exchange upon the effective time of the Merger.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties and all other information, documents or reports included or incorporated by reference in this prospectus and, if applicable, any prospectus supplement or other offering materials, including the risks and uncertainties set forth under the heading “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, filed with the SEC on March 17, 2016, which are incorporated by reference in this prospectus, and any updates to those risk factors included from time to time in our periodic and current reports filed with the SEC and incorporated by reference in this prospectus. 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. 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.

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 of 1933, as amended, or 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 and incorporated by reference 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 our periodic reports, including our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, entitled “Business,” “Risk Factors,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” as well as other sections in this prospectus and the documents or reports incorporated by reference 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 cash, cash equivalents, investments and other resources;
- 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.

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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 and the risk factors incorporated by reference herein, 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, the documents and reports incorporated by reference in 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 the forward-looking statements contained in any document or report incorporated by reference in this prospectus are made as of the dates of such documents or reports. 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.

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.

SELLING STOCKHOLDERS

This prospectus covers the resale by the selling stockholders identified below of 13,947,599 shares of our common stock. The selling stockholders acquired such shares of common stock pursuant to the Exchange in the Merger or from other stockholders who acquired such shares of common stock 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 of our common stock being offered in this prospectus. 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 March 31, 2016 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.

Name of Beneficial Owner	Shares Beneficially Owned Before the Offering		Shares Being Offered	Shares Beneficially Owned After the Offering	
	(#)	(%)(1)		(#)(1)(2)	(%)(1)(2)
A. Demby	7,912	*	7,912	—	*
A. Van Breene	1,100	*	1,100	—	*
Aaron Gathmann	1,600	*	1,600	—	*
Abbot A. Thayer	1,500	*	1,500	—	*
Afroditi Kontos	2,500	*	2,500	—	*
Alan M. Mindel	1,600	*	1,600	—	*
Alan Young	2,400	*	2,400	—	*
Albert B. Erwin, Jr.	3,125	*	3,125	—	*
Allen O. Cage Jr. & Jolaine Cage	3,125	*	3,125	—	*
Amy Habie	2,000	*	2,000	—	*
Andrew & Gloria Wahl	2,000	*	2,000	—	*
Andrew S. Rosen	3,037	*	3,037	—	*
Annette North(3)	127,498	*	93,750	33,748	*
Anthony Behette	5,000	*	5,000	—	*
Anthony D. Johnson	3,150	*	3,150	—	*
Anthony M. Insogna	3,997	*	3,997	—	*
Antonio Gualberto(4)	346,223	1.62%	339,973	6,250	*

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Name of Beneficial Owner	Shares Beneficially Owned Before the Offering		Shares Being Offered	Shares Beneficially Owned After the Offering	
	(#)	(%)(1)		(#)(1)(2)	(%)(1)(2)
Araxes Pharma LLC(5)	406,736	1.90%	406,736	—	*
ARCH Venture Fund VIII, L.P.(6)	1,344,937	6.29%	1,344,937	—	*
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	—	*
Boxer Capital, LLC	569,620	2.67%	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	800	*	800	—	*
Christopher Justin Kirk	7,994	*	7,994	—	*
Clough Investment Partners I, L.P.	316,004	1.48%	316,004	—	*
Clough Investment Partners II, L.P.	12,150	*	12,150	—	*
Clough Offshore Fund (QP), Ltd.	18,880	*	18,880	—	*
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	2,000	*	2,000	—	*
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	100	*	100	—	*
David Fyfe	1,750	*	1,750	—	*
David M. Morse	1,200	*	1,200	—	*
David Quinby	2,250	*	2,250	—	*
David Silverman	2,000	*	2,000	—	*
David Stangis	1,500	*	1,500	—	*
Demby Family LP	10,285	*	10,285	—	*
Diamond B Capital Trust	2,000	*	2,000	—	*
Donald Cameron	3,950	*	3,950	—	*
Donald Ingber	1,082	*	1,082	—	*
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	—	*
Dr. Joseph A. Penner	2,500	*	2,500	—	*
Duane Corcoran	1,300	*	1,300	—	*
Duane Renfro	2,500	*	2,500	—	*
Duncan J. Milcetic	4,000	*	4,000	—	*
Duvall Enterprises	3,125	*	3,125	—	*

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Name of Beneficial Owner	Shares Beneficially Owned Before the Offering		Shares Being Offered	Shares Beneficially Owned After the Offering	
	(#)	(%)(1)		(#)(1)(2)	(%)(1)(2)
Dwight Raymond Lemoine	3,125	*	3,125	—	*
EcoR1 Capital Fund Qualified, L.P.	918,000	4.30%	918,000	—	*
EcoR1 Capital Fund, L.P.	532,000	2.49%	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	—	*
Edwin Jordan	3,125	*	3,125	—	*
Eleven II Partners Ltd.	1,100	*	1,100	—	*
Elissa G. Wernick	1,600	*	1,600	—	*
Ellis R. Guilbeau	4,000	*	4,000	—	*
Emilio DiMatteo	5,000	*	5,000	—	*
Eugene & Maryann Lucadamo	1,000	*	1,000	—	*
Eugene J. Tonkovich	3,125	*	3,125	—	*
Faheem Hasnain(7)	33,983	*	23,983	10,000	*
Farshad & Ann Lalehzarian	4,000	*	4,000	—	*
Farzahn Kamali	23,734	*	23,734	—	*
Fern P. O'Brian	900	*	900	—	*
Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund	325,932	1.53%	325,932	—	*
Fidelity Select Portfolios: Biotechnology Portfolio	1,520,587	7.12%	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	*	197,785	—	*
Gang Xu	15,989	*	15,989	—	*
Gary Johnson	3,125	*	3,125	—	*
Gary W. Carlisle	525	*	525	—	*
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	1,000	*	1,000	—	*
Gerald C. Goldman	3,150	*	3,150	—	*
Gerald Tomsic 1995 Trust	100	*	100	—	*
Gerard Fragetti	1,100	*	1,100	—	*
Gerry Elman	1,000	*	1,000	—	*
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	4,000	*	4,000	—	*
Gloria C. Wahl	2,000	*	2,000	—	*
Gordon Lassar	3,204	*	3,204	—	*
Goro Takeda	31,978	*	31,978	—	*
Grant's Engineering & Machine Company	3,125	*	3,125	—	*
Greg Schmergel	1,900	*	1,900	—	*

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Name of Beneficial Owner	Shares Beneficially Owned Before the Offering		Shares Being Offered	Shares Beneficially Owned After the Offering	
	(#)	(%)(1)		(#)(1)(2)	(%)(1)(2)
Greg Sheldon	3,125	*	3,125	—	*
Gregory T. & Mary Jo Schiffman	2,250	*	2,250	—	*
Harold O. LaFlash & Greta G. LaFlash Revocable Trust	1,950	*	1,950	—	*
Harry Neff	2,500	*	2,500	—	*
Heidi Henson(8)	254,262	1.19%	247,596	6,666	*
Heidi Henson, Custodian for Emily Henson(9)	2,500	*	2,500	—	*
Heidi Henson, Custodian for Joshua Henson(9)	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(10)	12,500	*	12,500	—	*
If I Ran the Circus Irrevocable Trust for the benefit of Ethan Eliasson(11)	12,500	*	12,500	—	*
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	100	*	100	—	*
James E. Harris	100	*	100	—	*
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	100	*	100	—	*
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	2,150	*	2,150	—	*
Jeffrey Benison	1,000	*	1,000	—	*
Jeffrey L. Hilbert	800	*	800	—	*
Jeffrey Miller	3,125	*	3,125	—	*
Jerry Stockton	2,500	*	2,500	—	*
Jill & Chris Manning	2,300	*	2,300	—	*
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	—	*
John R. Bartos	3,125	*	3,125	—	*
John Sand & Linda McPhee	3,125	*	3,125	—	*
Johnson & Johnson Innovation—JJDC, Inc.	159,615	*	159,615	—	*
Jolanta Grembecka	37,500	*	37,500	—	*
Jonathan A. Kabakoff	3,997	*	3,997	—	*
Jonathan C. Guest	1,600	*	1,600	—	*
Jonathan T. McClure	3,125	*	3,125	—	*

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Name of Beneficial Owner	Shares Beneficially Owned Before the Offering		Shares Being Offered	Shares Beneficially Owned After the Offering	
	(#)	(%)(1)		(#)(1)(2)	(%)(1)(2)
Jorge Morazzani	500	*	500	—	*
Jose A. Olivares	1,100	*	1,100	—	*
Joseph & Jennifer Garone	2,750	*	2,750	—	*
Joseph Berkowitz	800	*	800	—	*
Joseph H. McCall	2,500	*	2,500	—	*
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	—	*
Katherine Cooper Rasmussen	1,500	*	1,500	—	*
Katharine Marcell Haxen Revocable Living Trust	1,125	*	1,125	—	*
Keith Manchester	15,823	*	15,823	—	*
Keith O. Newton	1,617	*	1,617	—	*
Keith R. Collins	2,500	*	2,500	—	*
Kenneth J. Hite & Constance Cservenyak Rev Living Trust	800	*	800	—	*
Kevan Shokat	750,000	3.51%	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	900	*	900	—	*
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	1,750	*	1,750	—	*
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.	4,000	*	4,000	—	*
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	—	*
Marc E. Jaffe	1,100	*	1,100	—	*
Marguerite Behette-Hart	5,000	*	5,000	—	*
Mario R. Dell'Aera, Jr.	4,052	*	4,052	—	*
Mark A. & Arthur Koerner	2,000	*	2,000	—	*
Mark Cook	3,150	*	3,150	—	*
Mark Nicholas Tompkins	258	*	258	—	*
Mark Rasmussen	1,500	*	1,500	—	*
Mark W. Croll & Joni S. Croll	1,200	*	1,200	—	*
Marlene Mindel	3,000	*	3,000	—	*
Marvin Mermelstein	3,125	*	3,125	—	*
Mary Ann Bosanac & Edward Bosanac	3,956	*	3,956	—	*

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Name of Beneficial Owner	Shares Beneficially Owned Before the Offering		Shares Being Offered	Shares Beneficially Owned After the Offering	
	(#)	(%)(1)		(#)(1)(2)	(%)(1)(2)
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	2,050	*	2,050	—	*
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 Stefanovich	1,500	*	1,500	—	*
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(12)	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)	2,500	*	2,500	—	*
Neal Rosen	12,500	*	12,500	—	*
Neil B. Goldstein	500	*	500	—	*
Neil M. Kaufman	1,600	*	1,600	—	*
Nextech IV Oncology S.C.S. SICAV-SIF	553,796	2.59%	553,796	—	*
Nicholas S. Cucinelli	1,600	*	1,600	—	*
Nima Shokat	3,956	*	3,956	—	*
Norman Goldberg	2,500	*	2,500	—	*
Orville Chambers	100	*	100	—	*
Osage University Partners II, LP	474,684	2.22%	474,684	—	*
P. Kent Hawryluk Revocable Trust	31,978	*	31,978	—	*
Paul C. Sarahan	1,750	*	1,750	—	*
Perry Jacobson	1,625	*	1,625	—	*
Peter A. Casey	1,300	*	1,300	—	*
Peter Stewart	1,600	*	1,600	—	*
PFM Healthcare Opportunities Master Fund, L.P.	137,683	*	137,683	—	*
PFM Healthcare Principals Fund, L.P.	17,319	*	17,319	—	*
Philip Herbert Lippel	1,250	*	1,250	—	*
Philip M. Arlen	2,676	*	2,676	—	*
Pingda Ren(13)	762,524	3.57%	758,358	4,166	*
Pingda Ren, Custodian for Evan T. Ren(14)	7,812	*	7,812	—	*
Pingda Ren, Custodian for Oliver T. Ren(14)	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	100	*	100	—	*

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Name of Beneficial Owner	Shares Beneficially Owned Before the Offering		Shares Being Offered	Shares Beneficially Owned After the Offering	
	(#)	(%)(1)		(#)(1)(2)	(%)(1)(2)
RE Monks Construction Company, LLC	1,250	*	1,250	—	*
Red Fish Blue Fish Revocable Trust, dated December 31, 2012(15)	1,736,991	8.13%	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 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 E. Hoffman(16)	19,494	*	9,494	10,000	*
Robert Kaufman	5,000	*	5,000	—	*
Robert T. Geras	2,000	*	2,000	—	*
Roger Joseph Schwarz	5,000	*	5,000	—	*
Roger S. Ballentine	1,100	*	1,100	—	*
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	100	*	100	—	*
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	—	*
Shreefal Mehta	900	*	900	—	*
Skyline, LLLP	31,978	*	31,978	—	*
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	900	*	900	—	*
Stuart Simpson	3,164	*	3,164	—	*
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	2,000	*	2,000	—	*
Thomas & Joy Licata	2,500	*	2,500	—	*
Thomas D. Paul	3,000	*	3,000	—	*
Thomas Mayberry	3,125	*	3,125	—	*

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Name of Beneficial Owner	Shares Beneficially Owned Before the Offering		Shares Being Offered	Shares Beneficially Owned After the Offering	
	(#)	(%)(1)		(#)(1)(2)	(%)(1)(2)
Todd F. Miller & Kennerly C. Miller	900	*	900	—	*
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	—	*
Vadim Garbar	2,500	*	2,500	—	*
Valerie Lens	2,500	*	2,500	—	*
Vernon Simpson	1,250	*	1,250	—	*
Vincent Latour	4,000	*	4,000	—	*
Walter Cremin	2,500	*	2,500	—	*
Wayne Fleischhacker	4,000	*	4,000	—	*
Wayne K. Baldin	100	*	100	—	*
Wei Tong Ma	3,125	*	3,125	—	*
William Crossman	1,300	*	1,300	—	*
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(17)	738,541	3.46%	734,375	4,166	*
Yi Liu, Custodian for Max Liu(18)	7,812	*	7,812	—	*
Yi Liu, Custodian for Nicholas Liu(18)	7,812	*	7,812	—	*

* Less than 1%

- (1) Applicable percentage ownership is based on 21,370,560 shares of our common stock outstanding as of March 31, 2016.
- (2) Assumes the sale of all shares offered in this prospectus.
- (3) Consists of (a) 93,750 shares of common stock owned by Annette North and (b) 33,748 shares that Ms. North has the right to acquire from us within 60 days of March 31, 2016 pursuant to the exercise of stock options. Ms. North is our Senior Vice President, General Counsel.
- (4) Consists of (a) 339,973 shares of common stock owned by Antonio Gualberto, M.D., Ph.D. and (b) 6,250 shares that Dr. Gualberto has the right to acquire from us within 60 days of March 31, 2016 pursuant to the exercise of stock options. Dr. Gualberto is our Chief Medical Officer.
- (5) Troy E. Wilson, Ph.D., J.D., our Chairman, President and Chief Executive Officer, has beneficial ownership over such shares.
- (6) 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.
- (7) Consists of (a) 23,983 shares of common stock owned by Faheem Hasnain and (b) 10,000 shares that Mr. Hasnain has the right to acquire from us within 60 days of March 31, 2016 pursuant to the exercise of stock options. Mr. Hasnain serves on our board of directors.

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- (8) Consists of (a) 247,596 shares of common stock owned by Heidi Henson and (b) 6,666 shares that Ms. Henson has the right to acquire from us within 60 days of March 31, 2016 pursuant to the exercise of stock options. Ms. Henson is our Chief Financial Officer and Secretary.
- (9) Ms. Henson is our Chief Financial Officer and Secretary.
- (10) If I Ran the Circus Irrevocable Trust for the benefit of Aidan Eliasson is a trust for the benefit of Troy E. Wilson, Ph.D., J.D.'s minor child. Dr. Wilson is our Chairman, President and Chief Executive Officer.
- (11) If I Ran the Circus Irrevocable Trust for the benefit of Ethan Eliasson is a trust for the benefit of Troy E. Wilson, Ph.D., J.D.'s minor child. Dr. Wilson is our Chairman, President and Chief Executive Officer.
- (12) Thomas Malley, a member of our board of directors, is the president of Mossrock Capital, LLC and has voting and investment power over such shares.
- (13) Consists of (a) 758,358 shares of common stock owned by Pingda Ren, Ph.D. and (b) 4,166 shares that Dr. Ren has the right to acquire from us within 60 days of March 31, 2016 pursuant to the exercise of stock options. Dr. Ren is our Senior Vice President, Chemistry and Pharmaceutical Sciences.
- (14) Dr. Ren is our Senior Vice President, Chemistry and Pharmaceutical Sciences.
- (15) Troy E. 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.
- (16) Consists of (a) 9,494 shares of common stock owned by Robert E. Hoffman and (b) 10,000 shares that Mr. Hoffman has the right to acquire from us within 60 days of March 31, 2016 pursuant to the exercise of stock options. Mr. Hoffman serves on our board of directors.
- (17) Consists of (a) 734,375 shares of common stock owned by Yi Liu, Ph.D. and (b) 4,166 shares that Dr. Liu has the right to acquire from us within 60 days of March 31, 2016 pursuant to the exercise of stock options. Dr. Liu is our Chief Scientific Officer.
- (18) Dr. Liu 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

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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(a)(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(a)(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 March 31, 2016, 21,370,560 shares of our common stock and no shares of our preferred stock were issued and outstanding. Additionally, as of March 31, 2016, there were 1,193,275 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 a private placement, or 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 the 13,947,599 shares of our common stock being registered on the registration statement of which this prospectus forms a part. We assumed the registration rights agreement in connection with the Merger.

Resale Registration Rights

Pursuant to the registration rights agreement and subject to the rules and regulations of the SEC, we filed the registration statement of which this prospectus forms a part, 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. The registration statement was originally declared effective on July 21, 2015.

Registration of these shares under the Securities Act has resulted in the shares becoming saleable under the Securities Act, except for shares held by affiliates, subject to applicable lock-up restrictions. Any sales of securities by holders of these shares could adversely affect the trading prices 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 suspend (subject to limited blackout periods described below) or terminate the registration statement prior to the date which is the earlier of (x) July 21, 2018 and (y) the date on which all of the registrable shares cease to be registrable shares, or (ii) in the event any suspensions or terminations of the effectiveness of the registration statement exceeds 30 consecutive days 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, certain 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, certain 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 (July 21, 2018) 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 20.9% 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;

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- 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; provided, however, that our board of directors has approved, contingent and effective upon stockholder approval (which is being sought at our 2016 annual meeting of stockholders), an amendment to each of our amended and restated certificate of incorporation and amended and restated bylaws to, among other things, decrease the above mentioned voting threshold from at least 66 2/3% to a majority 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.

NASDAQ Global Select Market Listing

Our common stock is listed on the NASDAQ Global Select Market under the symbol "KURA."

LEGAL MATTERS

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

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2015, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference 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 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 North Torrey Pines Road, Suite 125, La Jolla, California 92037, Attn: Secretary, (858) 500-8800.

INCORPORATION BY REFERENCE

The SEC allows us to “incorporate by reference” the information we file with them, which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings we will make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act after the date of this prospectus until the termination of the offering of the shares covered by this prospectus (other than information furnished under Item 2.02 or Item 7.01 of Form 8-K):

- (1) Our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC on March 17, 2016;
- (2) The information specifically incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 from our definitive proxy statement on Schedule 14A (other than information furnished rather than filed) filed with the SEC on April 5, 2016;
- (3) Our Current Report on Form 8-K, filed with the SEC on February 4, 2016; and
- (4) The description of our common stock contained in our Registration Statement on Form 8-A, filed on November 4, 2015, including any amendment or report filed for the purpose of updating such description.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statements so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. You may request a copy of these documents, at no cost, by writing or telephoning us at: 11119 North Torrey Pines Road, Suite 125, La Jolla, California 92037, Attn: Secretary, (858) 500-8800.