

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

FORM 10-Q

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

For the quarterly period ended **June 30, 2015**

OR

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

For the transition period from _____ to _____

Commission File Number **001-36352**

AKEBIA THERAPEUTICS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

245 First Street, Suite 1100, Cambridge, MA
(Address of Principal Executive Offices)

20-8756903
(I.R.S. Employer
Identification No.)

02142
(Zip Code)

(617) 871-2098

(Registrant's Telephone Number, Including Area Code)

(Former Name, Former Address and Former Fiscal Year, if Changed Since Last Report)

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

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

Indicate by check mark whether 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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

<u>Class</u> Common Stock, \$0.00001 par value	<u>Outstanding at July 31, 2015</u> 28,882,530
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NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements that are being made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, or PSLRA, with the intention of obtaining the benefits of the “safe harbor” provisions of the PSLRA. Forward-looking statements involve risks and uncertainties. All statements other than statements of historical facts contained in this Quarterly Report on Form 10-Q are forward-looking statements. In some cases, you can identify forward-looking statements by words such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “target,” “will,” “would,” or the negative of these words or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

- the projected timing of (1) meetings with United States and European regulatory authorities, (2) commencement of a Phase 3 development program of AKB-6548 in non-dialysis patients with anemia related to chronic kidney disease (CKD), (3) submission of an NDA for AKB-6548, (4) data from our Phase 2 clinical study of AKB-6548 in CKD patients undergoing dialysis, (5) commencement of a Phase 3 development program in dialysis patients with anemia related to CKD, (6) filing an Investigational New Drug application with the U.S. Food and Drug Administration and (7) completion of preclinical proof-of-concept studies of AKB-6899 in ophthalmology;
- our development plans with respect to AKB-6548 and AKB-6899;
- the timing or likelihood of regulatory filings and approvals, including any required post-marketing testing or any labeling and other restrictions;
- our plans to commercialize AKB-6548, if it is approved;
- the implementation of our business model and strategic plans for our business, product candidates and technology;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our competitive position;
- our intellectual property position;
- developments and projections relating to our competitors and our industry;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing; and
- other risks and uncertainties, including those listed under Part II, Item 1A. Risk Factors.

All forward-looking statements in this Quarterly Report on Form 10-Q involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under Part II, Item 1A. Risk Factors and elsewhere in this Quarterly Report on Form 10-Q. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

This Quarterly Report on Form 10-Q also contains estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

NOTE REGARDING STOCK SPLIT

Unless otherwise indicated, all information in these condensed consolidated financial statements gives retrospective effect to the 1.75-for-1 stock split of the Company's common stock (the Stock Split) that was effected on March 6, 2014, as well as any other stock-splits in historical periods.

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PART I—FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

AKEBIA THERAPEUTICS, INC.

Condensed Consolidated Balance Sheets

(Unaudited)

(in thousands, except share and per share data)

	June 30, 2015	December 31, 2014
Assets		
Current assets:		
Cash and cash equivalents	\$ 76,248	\$ 32,780
Available for sale securities	76,541	76,138
Accounts receivable	48	48
Prepaid expenses and other current assets	2,125	1,514
Total current assets	154,962	110,480
Property and equipment, net	398	210
Other assets	305	305
Total assets	\$ 155,665	\$ 110,995
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 2,412	\$ 2,021
Accrued expenses	3,491	4,864
Total current liabilities	5,903	6,885
Other liabilities	10	32
Total liabilities	\$ 5,913	\$ 6,917
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Preferred stock \$0.00001 par value, 25,000,000 shares authorized at June 30, 2015 and December 31, 2014; 0 shares issued and outstanding at June 30, 2015 and December 31, 2014	—	—
Common stock: \$0.00001 par value; 175,000,000 shares authorized at June 30, 2015 and December 31, 2014; 28,882,530 and 20,370,624 shares issued and outstanding at June 30, 2015 and December 31, 2014, respectively	—	—
Additional paid-in capital	271,998	204,969
Treasury stock, at cost, 8,463 shares	(162)	(162)
Accumulated other comprehensive loss	(27)	(56)
Accumulated deficit	(122,057)	(100,673)
Total stockholders' equity	149,752	104,078
Total liabilities and stockholders' equity	\$ 155,665	\$ 110,995

See accompanying notes to unaudited condensed consolidated financial statements.

AKEBIA THERAPEUTICS, INC.

**Condensed Consolidated Statements of Operations and Comprehensive Loss
(Unaudited)
(in thousands, except share and per share data)**

	<u>Three months ended</u>		<u>Six months ended</u>	
	<u>June 30, 2015</u>	<u>June 30, 2014</u>	<u>June 30, 2015</u>	<u>June 30, 2014</u>
Operating expenses:				
Research and development	\$ 7,182	\$ 5,525	\$ 14,687	\$ 11,683
General and administrative	3,707	2,315	7,098	6,066
Total operating expenses	10,889	7,840	21,785	17,749
Operating loss	(10,889)	(7,840)	(21,785)	(17,749)
Other income (expense):				
Interest income (expense), net	116	51	212	70
Reimbursements from Aerpio	84	171	189	364
Net loss	\$ (10,689)	\$ (7,618)	\$ (21,384)	\$ (17,315)
Reconciliation of net loss to net loss applicable to common stockholders:				
Net loss	\$ (10,689)	\$ (7,618)	\$ (21,384)	\$ (17,315)
Accretion on preferred stock	—	—	—	(86,900)
Net loss applicable to common stockholders	\$ (10,689)	\$ (7,618)	\$ (21,384)	\$ (104,215)
Net loss per share applicable to common stockholders—basic and diluted	\$ (0.40)	\$ (0.39)	\$ (0.92)	\$ (9.48)
Weighted-average number of common shares used in net loss per share applicable to common stockholders—basic and diluted	26,614,671	19,652,056	23,340,590	10,987,692
Comprehensive loss:				
Net loss	\$ (10,689)	\$ (7,618)	\$ (21,384)	\$ (17,315)
Other comprehensive loss:				
Unrealized loss on securities	(19)	(8)	(27)	(8)
Comprehensive loss	\$ (10,708)	\$ (7,626)	\$ (21,411)	\$ (17,323)

See accompanying notes to unaudited condensed consolidated financial statements.

AKEBIA THERAPEUTICS, INC.

**Condensed Consolidated Statements of Cash Flows
(Unaudited)
(in thousands)**

	Six months ended	
	June 30, 2015	June 30, 2014
Operating activities:		
Net loss	\$ (21,384)	\$ (17,315)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation expense	50	20
Amortization of premium/discount on investments	271	25
Stock-based compensation expense	2,223	3,889
Changes in operating assets and liabilities:		
Accounts receivable	—	21
Prepaid expenses and other current assets	(610)	(950)
Accounts payable and accrued expenses	(987)	1,603
Other liabilities	(27)	30
Net cash used in operating activities	<u>(20,464)</u>	<u>(12,677)</u>
Investing activities:		
Purchase of equipment	(227)	(171)
Proceeds from maturities of available for sale securities	34,790	6,745
Purchases of available for sale securities	(35,434)	(24,291)
Net cash used in investing activities	<u>(871)</u>	<u>(17,717)</u>
Financing activities:		
Proceeds from the issuance of common stock, net of issuance costs	64,624	104,596
Proceeds from employee stock purchase plan	109	—
Proceeds from the exercise of stock options	73	—
Repurchase of treasury stock	—	(21)
Proceeds from the issuance of common stock	—	—
Payments on capital lease obligations	(3)	(2)
Net cash provided by financing activities	<u>64,803</u>	<u>104,573</u>
Increase in cash and cash equivalents	43,468	74,179
Cash and cash equivalents at beginning of period	32,780	21,215
Cash and cash equivalents at end of period	<u>\$ 76,248</u>	<u>\$ 95,394</u>
Non-cash financing activities:		
Accretion of preferred stock to redemption value	\$ —	\$ 86,900
Unpaid initial public offering issuance costs	\$ —	\$ 121
Assets acquired under capital lease	\$ 12	\$ 12

See accompanying notes to unaudited condensed consolidated financial statements

Notes to Condensed Consolidated Financial Statements
(Unaudited)

June 30, 2015

1. Nature of Organization and Operations

Akebia Therapeutics, Inc. (Akebia, or the Company) is a biopharmaceutical company focused on delivering innovative therapies to patients with kidney disease through the biology of hypoxia-inducible factor, or HIF. HIF is the primary regulator of the production of red blood cells in the body and a potentially novel mechanism of treating anemia. The Company's lead product candidate, AKB-6548, is being developed as a once-daily, oral therapy and has successfully completed a Phase 2b study demonstrating that AKB-6548 can safely and predictably raise hemoglobin levels in non-dialysis patients with anemia related to chronic kidney disease.

The Company's operations to date have been limited to organizing and staffing the Company, business planning, raising capital, acquiring and developing its technology, identifying potential product candidates and undertaking preclinical and clinical studies. The Company has not generated any product revenue to date, nor is there any assurance of any future product revenue. The Company's product candidates are subject to long development cycles and there is no assurance the Company will be able to successfully develop, obtain regulatory approval for or market its product candidates.

The Company is subject to a number of risks including, but not limited to, the need to obtain adequate additional funding, possible failure of preclinical testing or clinical trials, the need to obtain marketing approval for its product candidates, the development of new technological innovations by competitors, the need to successfully commercialize and gain market acceptance of any of the Company's products that are approved and the ability to protect its proprietary technology. If the Company does not successfully commercialize any of its products, it will be unable to generate product revenue or achieve profitability.

On March 25, 2014, the Company completed its initial public offering, or IPO, whereby the Company sold 6,762,000 shares of common stock, including 879,647 shares of common stock pursuant to the full exercise of an over-allotment option granted to the underwriters in connection with the offering, at a price of \$17.00 per share. The shares began trading on the NASDAQ Global Market on March 20, 2014. The aggregate net proceeds received by the Company from the offering were \$104.4 million, net of underwriting discounts and commissions and estimated offering expenses payable by the Company. Upon the closing of the IPO, all outstanding shares of convertible redeemable preferred stock converted into 12,115,183 shares of common stock. Additionally, the Company is now authorized to issue up to 175,000,000 shares of common stock and 25,000,000 shares of undesignated preferred stock.

In April 2015, the Company completed a follow-on public offering whereby the Company sold 8,363,636 shares of common stock, including 1,090,909 share of common stock pursuant to the full exercise of an over-allotment granted to the underwriters in connection with the offering, at a price of \$8.25 per share. The aggregate net proceeds received by the Company from the offering were approximately \$64.6 million, net of underwriting discounts and commissions and estimated offering expenses payable by the Company.

The Company believes that it can continue as a going concern as its cash resources of approximately \$152.8 million at June 30, 2015 will be sufficient to allow the Company to fund its current operating plan through at least the next twelve months. There can be no assurance, however, that the current operating plan will be achieved in the timeframe anticipated by the Company, or that its cash resources will fund the Company's operating plan for the period anticipated by the Company or that additional funding will be available on terms acceptable to the Company, or at all.

Unless otherwise indicated, all information in these condensed consolidated financial statements gives retrospective effect to the 1.75-for-1 stock split of the Company's common stock (the Stock Split) that was effected on March 6, 2014 (see Note 6), as well as any other stock-splits in historical periods.

The Company was incorporated on February 27, 2007 under the laws of the State of Delaware.

2. Summary of Significant Accounting Policies**Initial Public Offering**

On March 25, 2014, the Company completed its IPO. Upon the closing of the IPO, all outstanding shares of convertible redeemable preferred stock converted into 12,115,183 shares of common stock. The Company's preferred stock was redeemable at the greater of fair value or the original issuance price. The Company recorded \$86.9 million of accretion on the preferred stock in the period from

January 1, 2014 through the date of the closing of its IPO which represents the difference in the carrying value at December 31, 2013 and the fair value of the preferred stock just prior to conversion into common stock.

Basis of Presentation

The accompanying condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, Akebia Therapeutics Securities Corporation. All intercompany balances and transactions have been eliminated in consolidation. These condensed consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP"). Any reference in these notes to applicable guidance is meant to refer to the authoritative United States generally accepted accounting principles as found in the Accounting Standards Codification ("ASC") and Accounting Standards Update ("ASU") of the Financial Accounting Standards Board ("FASB").

The results of operations for the interim periods are not necessarily indicative of the results of operations to be expected for the full year. These interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements as of and for the year ended December 31, 2014, and the notes thereto, which are included in the Company's Annual Report on Form 10-K (File No. 001-3652), which was filed with the Securities and Exchange Commission ("SEC") on March 4, 2015.

Recent Accounting Pronouncements

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

In August 2014, the FASB issued ASU No. 2014-15, "*Presentation of Financial Statements – Going Concern (Subtopic 205-40)*". The ASU requires all entities to evaluate for the existence of conditions or events that raise substantial doubt about the entity's ability to continue as a going concern within one year after the issuance date of the financial statements. The accounting standard is effective for interim and annual periods ending after December 15, 2016, and will not have a material impact on the condensed consolidated financial statements, but may impact the Company's footnote disclosures.

Segment Information

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company views its operations and manages its business in one operating segment, which is the business of developing and commercializing proprietary therapeutics based on HIF biology.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP 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 revenues and expenses during the reporting period. Actual results may differ from those estimates. Management considers many factors in selecting appropriate financial accounting policies and controls, and in developing the estimates and assumptions that are used in the preparation of these condensed consolidated financial statements. Management must apply significant judgment in this process. In addition, other factors may affect estimates, including: expected business and operational changes, sensitivity and volatility associated with the assumptions used in developing estimates, and whether historical trends are expected to be representative of future trends. The estimation process often may yield a range of potentially reasonable estimates of the ultimate future outcomes, and management must select an amount that falls within that range of reasonable estimates. Estimates are used in the following areas, among others: stock-based compensation expense, fair value of common stock and preferred stock and the Company's other equity instruments (in periods prior to the IPO), accrued expenses, prepaid expenses and income taxes.

Prior to the IPO, the Company utilized significant estimates and assumptions in determining the fair value of its common stock. The Company granted stock options at exercise prices not less than the fair market value of its common stock as determined by the Board of Directors contemporaneously at the date such grants were made, with input from management. Prior to the Company's IPO in March 2014, the fair value of common stock at the grant date was adjusted in connection with the Company's retrospective fair value assessment for financial reporting purposes. Accordingly, the Board of Directors determined the estimated fair value of the Company's common stock based on a number of objective and subjective factors, including external market conditions affecting the biotechnology industry sector and the prices at which the Company sold shares of preferred stock, the superior rights and preferences of securities senior to the Company's common stock at the time and the likelihood of achieving a liquidity event, such as an IPO or sale of the Company.

Cash and Cash Equivalents

Cash and cash equivalents consist of all cash on hand, deposits and funds invested in available for sale securities with original maturities of three months or less at the time of purchase. At June 30, 2015, the Company's cash is primarily in money market funds. The Company may maintain balances with its banks in excess of federally insured limits.

Investments

Management determines the appropriate classification of securities at the time of purchase and reevaluates such designation as of each balance sheet date. Currently, the Company classifies all securities as available-for-sale which are included in current assets as they are intended to fund current operations. The Company carries available-for-sale securities at fair value. The Company conducts periodic reviews to identify and evaluate each investment that has an unrealized loss, in accordance with the meaning of other-than-temporary impairment and its application to certain investments. When assessing whether a decline in the fair value of a security is other-than-temporary, the Company considers the fair market value of the security, the duration of the security's decline, and prospects for the underlying business. Based on these considerations, the Company did not identify any other-than-temporary unrealized losses at June 30, 2015. Unrealized losses on available-for-sale securities that are determined to be temporary, and not related to credit loss, are recorded, net of tax, in accumulated other comprehensive loss, a component of stockholders' equity. The amortized cost of debt securities in this category reflects amortization of premiums and accretion of discounts to maturity computed under the effective interest method. The Company includes this amortization in the caption "Interest income (expense), net" within the Condensed Consolidated Statements of Operations and Comprehensive Loss. We also include in net investment income, realized gains and losses and declines in value determined to be other than temporary. The Company bases the cost of securities sold upon the specific identification method, and includes interest and dividends on securities in interest income.

Research and Development

Costs incurred in connection with research and development activities are expensed as incurred. Research and development expenses consist of (i) employee-related expenses, including salaries, benefits, travel and stock-based compensation expense; (ii) external research and development expenses incurred under arrangements with third parties, such as contract research organizations, investigational sites and consultants; (iii) the cost of acquiring, developing and manufacturing clinical study materials; (iv) facilities and other expenses, which include direct and allocated expenses for rent and maintenance of facilities; and (v) costs associated with preclinical and clinical activities and regulatory operations.

The Company enters into consulting, research and other agreements with commercial firms, researchers, universities and others for the provision of goods and services. Under such agreements, the Company may pay for services on an hourly, monthly, quarterly, project or other basis. Such arrangements are generally cancellable upon reasonable notice and payment of costs incurred. Costs are considered incurred based on an evaluation of the progress to completion of specific tasks under each contract using information and data provided to us by the Company's clinical sites and vendors. These costs consist of direct and indirect costs associated with specific projects, as well as fees paid to various entities that perform certain research on behalf of the Company.

Patents

Costs incurred in connection with the application for and issuance of patents are expensed as incurred.

Income Taxes

Income taxes are recorded in accordance with FASB ASC Topic 740, *Income Taxes* (ASC 740), which provides for deferred taxes using an asset and liability approach. The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the condensed consolidated financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the condensed consolidated financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are provided, if, based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company accounts for uncertain tax positions in accordance with the provisions of ASC 740. When uncertain tax positions exist, the Company recognizes the tax benefit of tax positions to the extent that the benefit will more likely than not be realized. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position, as well as consideration of the available facts and circumstances. As of June 30, 2015 and December 31, 2014, the Company does not have any significant uncertain tax positions. The Company recognizes interest and penalties related to uncertain tax positions in income tax expense.

Stock-Based Compensation

The Company accounts for its stock-based compensation awards in accordance with FASB ASC Topic 718, *Compensation—Stock Compensation* (ASC 718). ASC 718 requires all stock-based payments to employees, including grants of employee stock options,

restricted stock, restricted stock units, or RSUs, and modifications to existing stock awards, to be recognized in the statements of operations and comprehensive loss based on their fair values. The Company accounts for stock-based awards to non-employees in accordance with FASB ASC Topic 505-50, *Equity-Based Payments to Non-Employees* (ASC 505-50), which requires the fair value of the award to be re-measured at fair value until a performance commitment is reached or counterparty performance is complete. The Company's stock-based awards are comprised of stock options, shares of restricted stock and shares of common stock. The Company estimates the fair value of options granted using the Black-Scholes option pricing model. The Company uses the value of its common stock to determine the fair value of restricted stock awards and common stock awards.

The Black-Scholes option pricing model requires the input of certain subjective assumptions, including (a) the expected stock price volatility, (b) the calculation of expected term of the award, (c) the risk-free interest rate and (d) expected dividends. Due to the lack of a public market for the trading of the Company's common stock and a lack of company-specific historical and implied volatility data, the Company has based its estimate of expected volatility on the historical volatility of a group of similar companies that are publicly traded. The historical volatility is calculated based on a period of time commensurate with the expected term assumption. The computation of expected volatility is based on the historical volatility of a representative group of companies with similar characteristics to the Company, including stage of product development and life science industry focus. The Company is in a very early stage of product development with no revenue and the representative group of companies has certain similar characteristics to the Company. The Company believes the group selected has sufficient similar economic and industry characteristics, and includes companies that are most representative of the Company. The Company uses the simplified method as prescribed by the SEC Staff Accounting Bulletin No. 107, *Share-Based Payment*, to calculate the expected term for options granted to employees as it does not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term. The expected term is applied to the stock option grant group as a whole, as the Company does not expect substantially different exercise or post-vesting termination behavior among its employee population. For options granted to non-employees, the Company utilizes the contractual term of the arrangement as the basis for the expected term assumption. The risk-free interest rate is based on a treasury instrument whose term is consistent with the expected life of the stock options. The expected dividend yield is assumed to be zero as the Company has never paid dividends and has no current plans to pay any dividends on its common stock, which is similar to the Company's peer group.

The Company's stock-based awards are subject to either service- or performance-based vesting conditions. Compensation expense related to awards to employees with service-based vesting conditions is recognized on a straight-line basis based on the grant date fair value over the associated service period of the award, which is generally the vesting term. Consistent with the guidance in ASC 505-50, compensation expense related to awards to non-employees with service-based vesting conditions is recognized on a straight-line basis based on the then-current fair value at each financial reporting date prior to the measurement date over the associated service period of the award, which is generally the vesting term. Compensation expense related to awards to employees with performance-based vesting conditions is recognized based on the grant date fair value over the requisite service period using the accelerated attribution method to the extent achievement of the performance condition is probable. Consistent with the guidance in ASC 505-50, compensation expense related to awards to non-employees with performance-based vesting conditions is recognized based on the then-current fair value at each financial reporting date prior to the measurement date over the requisite service period using the accelerated attribution method to the extent achievement of the performance condition is probable.

The Company is also required to estimate forfeitures at the time of grant, and revise those estimates in the subsequent periods if actual forfeitures differ from its estimates. The Company uses historical data to estimate pre-vesting forfeitures and record stock-based compensation expense only for those awards that are expected to vest. To the extent that actual forfeitures differ from the Company's estimates, the difference is recorded as a cumulative adjustment in the period the estimates were revised. Stock-based compensation expense recognized in the condensed consolidated financial statements is based on awards that are ultimately expected to vest.

Fair Value of Financial Instruments

The Company is required to disclose information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. FASB ASC Topic 820, *Fair Value Measurements and Disclosures* (ASC 820), establishes a hierarchy of inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the observable inputs be used when available.

Observable inputs are inputs that market participants would use in pricing the asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the inputs that market participants would use in pricing the asset or liability, and are developed based on the best information available in the circumstances. The fair value hierarchy applies only to the valuation inputs used in determining the reported fair value of the investments, and is not a measure of the investment credit quality. The three levels of the fair value hierarchy are described below:

- Level 1 – Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.

- Level 2 – Valuations based on quoted prices for similar assets or liabilities in markets that are not active, or for which all significant inputs are observable, either directly or indirectly.
- Level 3 – Valuations that require inputs that reflect the Company’s own assumptions that are both significant to the fair value measurement and unobservable.

To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. A financial instrument’s level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Items measured at fair value on a recurring basis include short-term investments (see Note 5). The carrying amounts of accounts receivable, prepaid expenses and other current assets, accounts payable and accrued expenses approximate their fair values due to their short-term maturities. The rate implicit within the Company’s capital lease obligation approximates market interest rates.

Concentrations of Credit Risk and Off-Balance Sheet Risk

Cash, investments and accounts receivable are the only financial instruments that potentially subject the Company to concentrations of credit risk. At June 30, 2015 and December 31, 2014, all of the Company’s cash was deposited in accounts at two principal financial institutions. The Company maintains its cash with high quality, accredited financial institutions and, accordingly, such funds are subject to minimal credit risk. The Company has no significant off-balance sheet concentrations of credit risk, such as foreign currency exchange contracts, option contracts or other hedging arrangements.

Net Loss per Share

Basic net loss per share is calculated by dividing net loss attributable to common stockholders by the weighted-average shares outstanding during the period, without consideration for common stock equivalents. Diluted net loss per share is calculated by adjusting weighted-average shares outstanding for the dilutive effect of common stock equivalents outstanding for the period, determined using the treasury-stock method. For purposes of the diluted net loss per share calculation, preferred stock, stock options, unvested restricted stock and RSUs are considered to be common stock equivalents, but have been excluded from the calculation of diluted net loss per share, as their effect would be anti-dilutive for all periods presented. Therefore, basic and diluted net loss per share were the same for all periods presented.

Property and Equipment

Property and equipment is stated at cost, less accumulated depreciation. Assets under capital lease are included in property and equipment. Property and equipment is depreciated using the straight-line method over the estimated useful lives of the assets, generally three to seven years. Such costs are periodically reviewed for recoverability when impairment indicators are present. Such indicators include, among other factors, operating losses, unused capacity, market value declines and technological obsolescence. Recorded values of asset groups of equipment that are not expected to be recovered through undiscounted future net cash flows are written down to current fair value, which generally is determined from estimated discounted future net cash flows (assets held for use) or net realizable value (assets held for sale).

The following is the summary of property and equipment and related accumulated depreciation as of June 30, 2015 and December 31, 2014.

	Useful Life	June 30, 2015	December 31, 2014
		(in thousands)	
Computer equipment and software	3	\$ 131	\$ 99
Furniture and fixtures	5	243	117
Equipment	7	46	6
	Shorter of the useful life or remaining lease term		
Leasehold improvements	(3 years)	55	27
Office equipment under capital lease	3	24	12
		499	261
Less accumulated depreciation		(101)	(51)
Net property and equipment		<u>\$ 398</u>	<u>\$ 210</u>

Depreciation expense, including expense associated with assets under capital leases, was approximately \$32,000 and \$12,000 for the three months ended June 30, 2015 and 2014, respectively and \$50,000 and \$20,000 for the six months ended June 30, 2015 and 2014, respectively.

3. Available for sale securities

Available for sale securities at June 30, 2015 and December 31, 2014 consist of the following:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(in thousands)			
June 30, 2015				
Cash and cash equivalents:				
Cash and money market account	\$ 76,248	\$ —	\$ —	\$ 76,248
Total cash and cash equivalents	\$ 76,248	\$ —	\$ —	\$ 76,248
Available for sale securities:				
Certificates of deposit	\$ 19,721	—	—	\$ 19,721
U.S. Government debt securities	38,546	10	(14)	38,542
Corporate debt securities	18,301	2	(25)	18,278
Total available for sale securities	\$ 76,568	\$ 12	\$ (39)	\$ 76,541
Total cash, cash equivalents, and available for sale securities	\$ 152,816	\$ 12	\$ (39)	\$ 152,789

The estimated fair value of the Company's available for sale securities balance at June 30, 2015, by contractual maturity, is as follows:

Due in one year or less	\$ 37,785
Due after one year	38,756
Total available for sale securities	\$ 76,541

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(in thousands)			
December 31, 2014				
Cash and cash equivalents:				
Cash and money market account	\$ 32,780	\$ —	\$ —	\$ 32,780
Total cash and cash equivalents	\$ 32,780	\$ —	\$ —	\$ 32,780
Available for sale securities:				
Certificates of deposit	\$ 13,429	—	—	\$ 13,429
U.S. Government debt securities	38,412	1	(28)	38,385
Commercial paper	2,499	—	—	2,499
Corporate debt securities	21,854	3	(32)	21,825
Total available for sale securities	\$ 76,194	\$ 4	\$ (60)	\$ 76,138
Total cash, cash equivalents, and available for sale securities	\$ 108,974	\$ 4	\$ (60)	\$ 108,918

4. Fair Value of Financial Instruments

The Company utilizes a portfolio management company for the valuation of the majority of its investments. This company is an independent, third-party vendor recognized to be an industry leader with access to market information that obtains or computes fair market values from quoted market prices, pricing for similar securities, recently executed transactions, cash flow models with yield curves and other pricing models. For valuations obtained from the pricing service, the Company performs due diligence to understand how the valuation was calculated or derived, focusing on the valuation technique used and the nature of the inputs.

Based on the fair value hierarchy, the Company classifies its cash equivalents and marketable securities within Level 1 or Level 2. This is because the Company values its cash equivalents and marketable securities using quoted market prices or alternative pricing sources and models utilizing market observable inputs.

Assets measured or disclosed at fair value on a recurring basis as of June 30, 2015 are summarized below:

	Fair Value Measurements Using			Total
	Level 1	Level 2	Level 3	
	(in thousands)			
Assets:				
Cash and cash equivalents	\$ 76,248	\$ —	\$ —	\$ 76,248
Certificates of deposit	—	19,721	—	19,721
U.S. Government debt securities	—	38,542	—	38,542
Corporate debt securities	—	18,278	—	18,278
	<u>\$ 76,248</u>	<u>\$ 76,541</u>	<u>\$ —</u>	<u>\$ 152,789</u>

The Company's corporate debt securities are all investment grade.

Assets measured or disclosed at fair value on a recurring basis as of December 31, 2014 are summarized below:

	Fair Value Measurements Using			Total
	Level 1	Level 2	Level 3	
	(in thousands)			
Assets:				
Cash and cash equivalents	\$ 32,780	\$ —	\$ —	\$ 32,780
Certificates of deposit	—	13,429	—	13,429
U.S. Government debt securities	—	38,385	—	38,385
Commercial paper	—	2,499	—	2,499
Corporate debt securities	—	21,825	—	21,825
	<u>\$ 32,780</u>	<u>\$ 76,138</u>	<u>\$ —</u>	<u>\$ 108,918</u>

The Company had no assets or liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) at June 30, 2015 and December 31, 2014.

Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities and the level of uncertainty related to changes in the value of investment securities, it is at least reasonably possible that changes in risks in the near term would result in material changes in the fair value of investments.

5. Accrued Expenses

Accrued expenses are as follows:

	June 30, 2015	(in thousands)		December 31, 2014
Professional fees	\$	1,707	\$	2,460
Accrued bonus		653		1,286
Accrued vacation		263		177
Accrued severance		60		179
Accrued payroll		212		213
Other		596		549
Total accrued expenses	<u>\$</u>	<u>3,491</u>	<u>\$</u>	<u>4,864</u>

In February 2014, the Company entered into a separation agreement with an employee primarily as a result of the transition to the Company's Cambridge, Massachusetts location. During the first quarter of 2014, the Company recorded severance expense in the amount of \$0.3 million, which was recorded to general and administrative expense. During the first six months of 2015, approximately \$46,000 was paid out of the severance accrual. At June 30, 2015, \$0 remained in accrued expenses in relation to this separation agreement.

In August 2014, the Company entered into a separation agreement with an employee. The Company records the expense and liability associated with the separation agreement ratably over the period from August 5, 2014 through December 31, 2015 because the severance payments are subject to continued service and forfeiture until December 31, 2015. During the second quarter of 2015, the Company recorded severance expense in the amount of \$0.1 million, which was recorded to research and development expense. During the first six months of 2015, approximately \$0.2 million was paid out of the severance accrual. Payments under this separation agreement will be paid out through December 2015.

6. Stockholders' Equity

As of June 30, 2015, the authorized capital stock of the Company included 175,000,000 shares of common stock, par value \$0.00001 per share and 25,000,000 shares of undesignated preferred stock, par value \$0.00001 per share.

On March 6, 2014, the Company effected a 1.75-for-1 stock split of its outstanding common stock. Unless otherwise indicated, all share data and per share amounts in these condensed consolidated financial statements have been retroactively adjusted to reflect the stock split, as well as any stock splits that occurred in periods prior to March 6, 2014.

Reserved for Future Issuance

As of June 30, 2015 and December 31, 2014 based on the authorized shares for each series, the Company has reserved the following shares of common stock for future issuance:

	June 30, 2015	December 31, 2014
Options to purchase common stock	1,975,620	1,526,346
Shares available for future issuance	1,641,559	1,549,154
Total	3,617,179	3,075,500

7. Income Taxes

Deferred tax assets and deferred tax liabilities are recognized based on temporary differences between the financial reporting and tax basis of assets and liabilities using statutory rates. A valuation allowance is recorded against deferred tax assets if it is more likely than not that some or all of the deferred tax assets will not be realized. There were no significant income tax provisions or benefits for the three and six months ended June 30, 2015 and 2014. Due to the uncertainty surrounding the realization of the favorable tax attributes in future tax returns, the Company has recorded a full valuation allowance against the Company's otherwise recognizable net deferred tax assets.

8. Commitments and Contingencies

In December 2013, the Company entered into a three-year lease for 6,837 square feet of office space in Cambridge, Massachusetts. The lease has monthly lease payments of approximately \$31,000 for the first twelve months, with annual rent escalation thereafter, and provides a rent abatement of approximately \$31,000 for the first full calendar month of the lease term. The lease term commenced and rental payments began in January 2014. The Company recorded a deferred lease obligation in 2014 which represents the cumulative difference between actual facility lease payments and lease expense recognized ratably over the lease period, which is included in other liabilities. In accordance with the lease, the Company entered into a cash-collateralized irrevocable standby letter of credit in the amount of \$125,345, naming the landlord as beneficiary.

In December 2014, the Company entered into a First Amendment to Lease, or the Amendment, for additional office space contiguous to its current office space in Cambridge, Massachusetts. The Amendment includes leasing an additional 8,530 square feet of office space, or the Expansion Space, with an occupancy date of March 13, 2015. The Amendment provides for additional monthly lease payments of approximately \$45,000 for the 8,530 square feet for the first twelve months and provides for annual rent escalations thereafter. The monthly rent on the existing 6,837 square feet will remain at approximately \$32,000 through December 31, 2016, the expiration of the lease. The Amendment includes a Landlord's contribution for leasehold improvements in the amount of approximately \$100,000 which will be accounted for as a deferred lease incentive and reduction in monthly rent expense over the term of the lease. The Company recorded an additional deferred lease obligation for the Expansion Space which represents the cumulative difference between actual facility lease payments and lease expense recognized ratably over the lease period. The Company has an existing cash-collateralized irrevocable standby letter of credit of \$125,345, naming the landlord as beneficiary. In connection with the Amendment, the Company paid an additional cash security deposit to the landlord of \$179,130. These amounts are included in other assets.

The Company leases office equipment under a three year capital lease with payments commencing in February 2014. The capital lease amounts are included in accrued expenses and other liabilities.

At June 30, 2015, the Company's future minimum payments required under these leases are as follows:

	Operating Lease	Capital Lease (in thousands)	Total
2015	\$ 460	\$ 4	\$ 464
2016	936	8	944
2017	—	5	5
2018	—	1	1
Total	<u>\$ 1,396</u>	<u>18</u>	<u>\$ 1,414</u>
Less amount representing interest		—	
Present value of minimum lease payments at June 30, 2015		<u>\$ 18</u>	

The Company recorded \$0.2 million and \$0.1 million in rent expense for the three months ended June 30, 2015 and 2014, respectively, and \$0.3 million and \$0.2 million in rent expense for the six months ended June 30, 2015 and 2014, respectively.

The Company contracts with various organizations to conduct research and development activities with remaining contract costs to the Company of approximately \$9.2 million and \$4.3 million at June 30, 2015 and December 31, 2014, respectively. The scope of the services under the research and development contracts can be modified and the contracts cancelled by the Company upon written notice. In some instances the contracts may be cancelled by the third party upon written notice.

9. Stock-Based Compensation

On February 28, 2014, the Company's Board of Directors adopted its 2014 Incentive Plan (2014 Plan) and its 2014 Employee Stock Purchase Plan (ESPP), which were subsequently approved by its stockholders and became effective upon the closing of the Company's IPO on March 25, 2014. The 2014 Plan replaces the 2008 Equity Incentive Plan (2008 Plan).

The 2014 Plan allows for the granting of stock options, stock appreciation rights, or SARs, restricted stock, unrestricted stock, RSUs, performance awards and other awards convertible into or otherwise based on shares of our common stock. Dividend equivalents may also be provided in connection with an award under the 2014 Plan. The Company's employees, officers, directors and consultants and advisors are eligible to receive awards under the 2014 Plan. The Company initially reserved 1,785,000 shares of its common stock for the issuance of awards under the 2014 Plan. The 2014 Plan provides that the number of shares reserved and available for issuance under the 2014 Plan will automatically increase annually on January 1st of each calendar year, by an amount equal to three percent (3%) of the number of shares of stock outstanding on a fully diluted basis as of the close of business on the immediately preceding December 31st. The Company's Board of Directors may act prior to January 1st of any year to provide that there will be no automatic increase in the number of shares available for grant under the 2014 Plan for that year (or that the increase will be less than the amount that would otherwise have automatically been made). Subject to adjustment, no more than 1,131,937 shares of our common stock may be delivered in satisfaction of incentive stock options awarded under the 2014 Plan.

The ESPP authorizes the initial issuance of up to a total of 262,500 shares of the Company's common stock to participating employees. The first offering period under the ESPP opened on January 2, 2015.

Any options or awards outstanding under the 2008 Plan at the time of adoption of the 2014 Plan remain outstanding and effective. As of June 30, 2015, the total number of common shares that may be issued under all equity award plans is 3,617,179 and 1,641,559 shares remain available for future grants.

In August 2014, the Company entered into both a separation agreement with an employee and a consulting agreement for continued services to the Company upon the separation date of December 31, 2014. As a result of the change in employment status to a consultant effective January 1, 2015, the Company recorded approximately \$300,000 of stock compensation expense during the first six months of 2015.

During the first six months of 2015, the Company granted 599,750 stock options to employees, 35,000 stock options to directors and 27,875 RSUs to employees.

Stock Options

Options granted by the Company vest over periods of between 12 and 48 months. Options vest in installments of (i) 25% at the one year anniversary and (ii) in either 36 or 48 equal monthly or 12 equal quarterly installments beginning in the thirteenth month after the

initial Vesting Commencement Date (as defined) or grant date, subject to the employee's continuous service with the Company. Options generally expire ten years after the date of grant.

Restricted Stock

On December 23, 2013, the Company issued 450,224 shares of restricted stock to employees and 79,067 shares of restricted stock to non-employees at a grant date fair value of \$7.42 per share. The aggregate grant date fair value for the shares of restricted stock issued on December 23, 2013 totaled approximately \$3.9 million. The awards of restricted stock contain a performance condition wherein vesting is contingent upon the Company's consummation of a liquidity event, as defined, prior to the fifth anniversary of the date of grant. Certain of the awards of restricted stock have a requisite service period that was complete upon grant. The remainder of the awards of restricted stock have a requisite service period of four years whereby the award vests 25% on the one year anniversary of the Vesting Commencement Date (as defined), then ratably on the first day of each calendar quarter for 12 quarters, subject to continuous service by the individual and achievement of the performance target. Due to the nature of the performance condition, the Company had concluded that the performance condition was not probable of achievement and therefore, recognition of compensation cost had been deferred until the occurrence of a liquidity event, as defined. The liquidity event occurred upon the closing of the Company's IPO on March 25, 2014. Accordingly, the Company recognized \$0.1 million of compensation expense on March 25, 2014 related to the restricted stock awards with a requisite service period that was complete upon grant. Compensation expense related to the remainder of the restricted stock awards is being recognized over the associated requisite service period commencing on March 25, 2014.

Restricted Stock Units

On March 6, 2015, the Company issued 27,875 RSUs to employees. The RSUs vest 100% on the three year anniversary. Total stock-compensation expense to be recognized over the life of the RSUs is \$0.3 million and will be recognized on a straight-line basis over the vesting period. The Company recorded approximately \$24,000 of stock-based compensation expense related to the RSUs during the second quarter of 2015 and approximately \$32,000 of stock-based compensation during the first six months of 2015.

Compensation Expense Summary

The Company has recognized the following compensation cost related to share-based awards:

	Three months ended		Six months ended	
	June 30, 2015	June 30, 2014	June 30, 2015	June 30, 2014
	(in thousands)		(in thousands)	
Research and development	\$ 397	\$ 961	\$ 962	\$ 1,906
General and administrative	698	483	1,261	1,983
Total	\$ 1,095	\$ 1,444	\$ 2,223	\$ 3,889

Compensation expense by type of award:

	Three months ended		Six months ended	
	June 30, 2015	June 30, 2014	June 30, 2015	June 30, 2014
	(in thousands)		(in thousands)	
Stock options	\$ 908	\$ 491	\$ 1,607	\$ 776
Restricted stock	142	953	542	3,113
Restricted stock units	24	—	32	—
Employee stock purchase plan	21	—	42	—
Total	\$ 1,095	\$ 1,444	\$ 2,223	\$ 3,889

Included in the compensation expense for the six months ended June 30, 2014, is approximately \$1.0 million related to the modification of awards in connection with an employee separation agreement in the first quarter of 2014.

10. Employee Retirement Plan

During 2008, the Company established a retirement plan (the Plan) authorized by Section 401(k) of the Internal Revenue Code. In accordance with the Plan, all employees who have attained the age of 21 are eligible to participate in the Plan as of the first Entry Date, as defined, following their date of employment. Each employee can contribute a percentage of compensation up to a maximum of the statutory limits per year. Company contributions are discretionary, and no contributions were made during the three months ended June 30, 2015 or 2014.

11. Net Loss per Share

The following table presents the calculation of basic and diluted net loss per share applicable to common stockholders:

	Three months ended		Six months ended	
	June 30, 2015	June 30, 2014	June 30, 2015	June 30, 2014
	(in thousands, except share and per share data)		(in thousands, except share and per share data)	
Numerator:				
Net loss	\$ (10,689)	\$ (7,618)	\$ (21,384)	\$ (17,315)
Accretion on preferred stock	—	—	—	(86,900)
Net loss applicable to common stockholders	<u>\$ (10,689)</u>	<u>\$ (7,618)</u>	<u>\$ (21,384)</u>	<u>\$ (104,215)</u>
Denominator:				
Weighted-average number of common shares – basic and diluted	<u>26,614,671</u>	<u>19,652,056</u>	<u>23,340,590</u>	<u>10,987,692</u>
Net loss per share applicable to common stockholders – basic and diluted	<u>\$ (0.40)</u>	<u>\$ (0.39)</u>	<u>\$ (0.92)</u>	<u>\$ (9.48)</u>

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

	Three months ended		Six months ended	
	June 30, 2015	June 30, 2014	June 30, 2015	June 30, 2014
Outstanding stock options	1,975,620	1,387,081	1,975,623	1,387,081
Unvested restricted stock	295,206	605,997	295,206	605,997
Unvested restricted stock units	25,875	—	25,875	—
Total	<u>2,296,701</u>	<u>1,993,078</u>	<u>2,296,704</u>	<u>1,993,078</u>

12. Subsequent Event

In July 2015, the Company formed a wholly-owned subsidiary, Akebia Europe Limited. This subsidiary will be the Company's legal representative in the European Union, interacting with European regulatory agencies.

In July 2015, AKB-6548 was assigned "vadadustat" as the United States Adopted Name, or USAN.

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

The following information should be read in conjunction with the unaudited financial information and the notes thereto included in this Quarterly Report on Form 10-Q and the condensed consolidated financial statements and notes thereto for the year ended December 31, 2014, and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, contained in our annual report on Form 10-K filed with the United States Securities and Exchange Commission, or the SEC, on March 4, 2015, which we refer to as our annual report.

This report contains forward-looking statements that are being made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, or PSLRA, with the intention of obtaining the benefits of the "safe harbor" provisions of the PSLRA. Forward-looking statements involve risks and uncertainties. In this Quarterly Report on Form 10-Q, words such as "may," "will," "expect," "anticipate," "estimate," "intend," and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements.

Our actual results and the timing of certain events may differ materially from the results discussed, projected, anticipated, or indicated in any forward-looking statements. We caution our readers that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from those expressed or implied by the forward-looking statements contained in this Quarterly Report on Form 10-Q.

The following information, including all forward-looking statements, should be considered in light of factors discussed elsewhere in this Quarterly Report on Form 10-Q, including those risks identified under Part II, Item 1A. Risk Factors.

We caution readers not to place undue reliance on any forward-looking statements made by us, which speak only as of the date they are made. We disclaim any obligation, except as specifically required by law and the rules of the SEC, to publicly update or revise any such statements to reflect any change in our expectations or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements.

Product Overview

We are a biopharmaceutical company focused on the development of novel proprietary therapeutics based on hypoxia inducible factor, or HIF, biology and the commercialization of these products for patients with kidney disease. HIF is the primary regulator of the production of red blood cells, or RBCs, in the body and a potentially novel mechanism for treating anemia.

Our Product Candidates

AKB-6548

Our lead product candidate, AKB-6548, is being developed as a once-daily, oral therapy. AKB-6548 works by a differentiated mechanism of action that we believe has the potential to be safer than that of injectable recombinant protein erythropoiesis stimulating agents, or rESAs. This novel mechanism of action is referred to as HIF prolyl-hydroxylase, or HIF-PH, inhibition. Instead of binding directly to the erythropoietin, or EPO, receptors on cells in the bone marrow, AKB-6548 leads to activation of critical pathways for hemoglobin and RBC production. This approach mimics the physiological adjustment made by the body when exposed to reduced oxygen levels at higher altitudes.

Anemia is a serious medical condition in which blood is deficient in RBCs and hemoglobin, both of which are critical in delivering oxygen to tissue. Anemia generally exists when hemoglobin, a protein in RBCs that carries oxygen, is less than 13 g/dL in men or 12 g/dL in women. Untreated anemia is associated with chronic fatigue, increased risk of progression of multiple diseases and death. Anemia is common in patients with chronic kidney disease, or CKD, cancer, heart failure, inflammatory diseases and other critical illnesses, as well as in the elderly.

We have successfully completed a Phase 2b study of AKB-6548 in non-dialysis patients with anemia related to CKD. In March 2015, we presented positive results from this Phase 2b study of AKB-6548 at the World Congress of Nephrology. The study demonstrated that AKB-6548 raised hemoglobin levels with no safety signal observed. We expect to initiate Phase 3 studies of AKB-6548 for anemia secondary to CKD in the non-dialysis population in 2015. If the results from these Phase 3 studies support the results we have previously demonstrated across ten clinical studies with a total of 20,000 days of patient exposure, we anticipate submitting a New Drug Application, or NDA, for AKB-6548 in the United States by 2019.

We are currently in Phase 2 clinical development of AKB-6548 for the treatment of anemia in patients undergoing dialysis, the second indication we plan to pursue. The results from that study are expected in the third quarter of 2015. Assuming these results are positive, we expect to initiate our Phase 3 program of AKB-6548 in dialysis-dependent patients in 2016.

We have commenced discussions with United States and European regulatory authorities regarding the design of our Phase 3 program. These discussions are ongoing. The elements of our global Phase 3 program will be determined over the course of these discussions, with the goal of harmonizing a single, global Phase 3 program. We expect these discussions to be finalized in the third quarter of this year and that we will begin enrolling patients in our Phase 3 program before the end of 2015.

AKB-6899

Our preclinical candidate, AKB-6899, is a small molecule HIF-PH inhibitor with potential therapeutic benefit in oncology and ophthalmology. AKB-6899 has demonstrated the ability in vitro to reduce VEGF levels in the presence of hypoxia. In several preclinical mouse models, AKB-6899 has been active in reducing tumor growth and development of metastases. Therefore, Investigational New Drug, or IND, enabling studies are being performed with the goal of opening an IND with the FDA in 2015. We expect to complete preclinical proof-of-concept studies of AKB-6899 in ophthalmology in early 2016.

We own worldwide rights to our product candidates. If approved by regulatory authorities, we plan to commercialize AKB-6548 in the United States ourselves and intend to seek one or more collaborators to commercialize the product candidate in additional markets.

Operating Overview

Since our inception in 2007, we have devoted the largest portion of our resources to our development efforts relating to AKB-6548, including preparing for and conducting clinical studies of AKB-6548, providing general and administrative support for these operations and protecting our intellectual property. We do not have any products approved for sale and have not generated any revenue from product sales. We have funded our operations primarily through our IPO, our follow-on public offering, and the private placement of preferred stock, common stock and convertible notes.

We have never been profitable and have incurred net losses in each year since inception. Our net losses were \$21.4 million and \$17.3 million for the six months ended June 30, 2015 and 2014, respectively. Substantially all of our net losses resulted from costs incurred in connection with our research and development programs and from general and administrative costs associated with our operations.

We expect to continue to incur significant operating expenses and increased operating losses for at least the next several years. We expect our expenses will increase substantially in connection with our ongoing activities, as we:

- complete our Phase 2 clinical study of AKB-6548 for the treatment of anemia in patients undergoing dialysis;
- prepare for and initiate a global Phase 3 development program of AKB-6548 for the treatment of anemia secondary to CKD;
- seek regulatory approvals for our product candidates that successfully complete clinical trials;
- have our product candidates manufactured for clinical trials and for commercial sale;
- establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval;
- continue preclinical and clinical development of AKB-6899;
- initiate additional preclinical, clinical or other studies for additional indications for AKB-6548, AKB-6899 and other product candidates that we may develop or acquire;
- seek to discover and develop additional product candidates;
- acquire or in-license other commercial products, product candidates and technologies;
- make royalty, milestone or other payments under any future in-license agreements;
- maintain, protect and expand our intellectual property portfolio;
- attract and retain skilled personnel; and
- create additional infrastructure to support our operations as a public company.

We do not expect to generate revenue from product sales unless and until we successfully complete development and obtain regulatory approval for one or more of our product candidates, which we expect will take a number of years and is subject to significant uncertainty. We have no manufacturing facilities, and all of our manufacturing activities are contracted out to third parties. Additionally, we currently utilize third-party contract research organizations, or CROs, to carry out our clinical development activities, and we do not yet have a sales organization. If we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Accordingly, we will seek to fund our operations through public or private equity or debt financings or other sources. However, we may be unable to raise additional funds or enter into other arrangements when needed on favorable terms or at all. Our failure to raise capital or enter into such other arrangements as and when needed would have a negative impact on our financial condition and our ability to develop our products.

On March 6, 2014, we effected a 1.75-for-1 stock split of our outstanding common stock. Our historical share and per share information have been retroactively adjusted to give effect to this stock split. Shares of common stock underlying outstanding stock options and other equity instruments were proportionately increased and the respective exercise prices, if applicable, were proportionately reduced in accordance with the terms of the agreements governing such securities. Shares of common stock reserved for issuance upon the conversion of our Series A Redeemable Convertible Preferred Stock, Series B Redeemable Convertible Preferred Stock and Series C Redeemable Convertible Preferred Stock were proportionately increased, and the respective conversion prices were proportionately reduced.

On March 25, 2014, we completed our IPO whereby we sold 6,762,000 shares of common stock, including 879,647 shares of common stock pursuant to the full exercise of an over-allotment option granted to the underwriters, at a price of \$17.00 per share. The shares began trading on the NASDAQ Global Market on March 20, 2014. The aggregate net proceeds received by us from the offering were approximately \$104.4 million, net of underwriting discounts and commissions and estimated offering expenses. Upon the closing of the IPO, all of our outstanding shares of convertible redeemable preferred stock converted into 12,115,183 shares of common stock. Additionally, we are now authorized to issue 175,000,000 shares of common stock and 25,000,000 shares of preferred stock.

On April 22, 2015, we completed a follow-on public offering whereby we sold 8,363,636 shares of common stock, including 1,090,909 share of common stock pursuant to the full exercise of an over-allotment granted to the underwriters in connection with the offering, at a price of \$8.25 per share. The aggregate net proceeds received by us from the offering were approximately \$64.6 million, net of underwriting discounts and commissions and estimated offering expenses.

Financial Overview

Revenue

To date, we have not generated any revenue from the sales of products or other means. Our ability to generate product revenue and become profitable depends upon our ability to successfully develop and commercialize products. We expect to incur losses for the foreseeable future, and we expect these losses to increase as we continue our development of, and seek regulatory approvals for, our product candidates and begin to commercialize any approved products. Because of the numerous risks and uncertainties associated with product development, we are unable to predict the timing or amount of increased expenses or when or if we will be able to achieve or maintain profitability. Even if we are able to generate revenue from the sale of our products, we may not become profitable. If we fail to become profitable or are unable to sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and be forced to reduce our operations.

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for the development of our product candidates, which include:

- employee-related expenses, including salaries, benefits, travel and stock-based compensation expense;
- expenses incurred under agreements with the CROs and investigative sites that conduct our clinical studies;
- the cost of acquiring, developing and manufacturing clinical study materials;
- facilities, depreciation and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance and other supplies; and
- costs associated with preclinical and clinical activities.

Research and development costs are expensed as incurred. Costs for certain development activities are recognized based on an evaluation of the progress to completion of specific tasks using information and data provided to us by our vendors and our clinical sites.

We cannot determine with certainty the duration and completion costs of the current or future clinical studies of our product candidates or if, when, or to what extent we will generate revenue from the commercialization and sale of any of our product candidates that obtain regulatory approval. We may never succeed in achieving regulatory approval for any of our product candidates.

The duration, costs and timing of clinical studies and development of our product candidates will depend on a variety of factors, including:

- the rate of progress of, results of and cost of completing our Phase 2 clinical development for AKB-6548 for the treatment of anemia in patients undergoing dialysis;
- assuming the AKB-6548 clinical development programs for CKD patients on dialysis and not on dialysis advance to Phase 3, the scope, design (including the use of an active comparator), size, rate of progress, results and costs of initiating and completing our Phase 3 development programs for AKB-6548;
- the scope, progress, results and costs of preclinical development, laboratory testing and clinical studies for AKB-6899 and any other product candidates that we may develop or acquire;
- the cost of having our product candidates manufactured for clinical trials;
- difficulties or delays in enrolling patients in our clinical trials;
- unanticipated changes to laws or regulations applicable to our clinical trials;
- the timing of, and the costs involved in, obtaining regulatory approvals for AKB-6548 in dialysis and non-dialysis indications and whether we will seek regulatory approval for both indications simultaneously, if clinical trials are successful; and
- the timing of, and costs involved in, obtaining regulatory approvals for AKB-6899 and any other product candidates if clinical trials are successful.

A change in the outcome of any of these variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if the FDA, EMA or another regulatory authority were to require us to conduct clinical studies in addition to or different from those that we currently anticipate, or if we experience significant delays in enrollment in any of our clinical studies, we could be required to expend significant additional financial resources and time on the completion of clinical development.

From inception through June 30, 2015, we have incurred \$91.8 million in research and development expenses. We plan to increase our research and development expenditures for the foreseeable future as we continue the development of AKB-6548 and AKB-6899. Our current and planned research and development activities include the following:

- We plan to initiate a Phase 3 development program for AKB-6548 in 2015 for anemia secondary to CKD in patients not on dialysis.
- We are currently in Phase 2 clinical development for AKB-6548 for the treatment of anemia in patients undergoing dialysis, the second indication we will pursue. The results from that study are expected in the third quarter of 2015.
- We intend to file an IND and begin Phase 1 studies for AKB-6899.

Our direct research and development expenses consist principally of external costs, such as startup fees paid to investigators, consultants, central laboratories and CROs in connection with our clinical studies, and costs related to acquiring and manufacturing clinical study materials.

We currently have two programs to which our research and development costs are attributable. Historically, we have not accumulated and tracked our research and development costs or our personnel and personnel-related costs on a program-by-program basis. Our employee and infrastructure resources, and many of our costs, were directed broadly to applicable research endeavors. As a result, we are unable to specify precisely the historical costs incurred for each of our programs on a program-by-program basis.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related costs for personnel, including stock-based compensation and travel expenses. Other general and administrative expense include facility-related costs, fees for directors, accounting and legal services fees, recruiting fees and expenses associated with obtaining and maintaining patents. We obtain from, and provide to, Aerpio services under the terms of administrative services agreements between the two companies. See "Certain Relationships and Related Party Transactions."

We anticipate that our general and administrative expenses will increase in the future as we increase our headcount to support our continued research and development and potential commercialization of our product candidates. We also anticipate increased expenses related to finance, legal, regulatory and tax-related services associated with maintaining compliance with exchange listing and SEC requirements, and our other costs associated with being a public company. Additionally, we anticipate an increase in payroll and related expenses if and when we prepare for commercial operations, especially in sales and marketing.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations are based on our condensed consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these condensed consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, and expenses and the disclosure of contingent assets and liabilities in our condensed consolidated 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 condensed consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q, we believe the following accounting policies to be most critical to the judgments and estimates used in the preparation of our condensed consolidated financial statements.

Accrued Research and Development Expenses

As part of the process of preparing our condensed consolidated financial statements, we are required to estimate our accrued expenses. This process involves reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of the actual cost. The majority of our service providers invoice us monthly in arrears for services performed. We make estimates of our accrued expenses as of each balance sheet date in our condensed consolidated financial statements based on facts and circumstances known to us at that time. We confirm the accuracy of our estimates with the service providers and make adjustments if necessary. Examples of estimated accrued research and development expenses include expenses for:

- CROs in connection with clinical studies;
- investigative sites in connection with clinical studies;
- vendors in connection with preclinical development activities; and
- vendors related to product manufacturing, development and distribution of clinical materials.

We base our expenses related to clinical studies on our estimates of the services received and efforts expended pursuant to contracts with multiple CROs that conduct and manage clinical studies on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. The scope of services under these contracts can be modified and some of the agreements may be cancelled by either party upon written notice. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the clinical expense. Payments under some of these contracts depend on factors such as the successful enrollment of subjects and the completion of clinical study milestones. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual or prepaid accordingly.

Although we do not expect our estimates to be materially different from amounts actually incurred, if our estimates of the status and timing of services performed differ from the actual status and timing of services performed we may report amounts that are too high or too low in any particular period. To date, there have been no material differences between our estimates and the amount actually incurred.

Stock-Based Compensation

Stock-Based Awards

We issue stock-based awards to employees and non-employees, generally in the form of stock options, restricted stock, RSUs and shares of common stock. We account for our stock-based compensation awards in accordance with FASB ASC Topic 718, *Compensation—Stock Compensation*, or ASC 718. ASC 718 requires all stock-based payments to employees, including grants of

employee stock options and restricted stock and modifications to existing stock awards, to be recognized in the statements of operations and comprehensive loss based on their fair values. We account for stock-based awards to non-employees in accordance with FASB ASC Topic 505-50, *Equity-Based Payments to Non-Employees*, or ASC 505-50, which requires the fair value of the award to be re-measured at fair value until a performance commitment is reached or counterparty performance is complete. Described below is the methodology we have utilized in measuring stock-based compensation expense. Since the consummation of our IPO, stock option, common stock and restricted stock values are determined based on the quoted market price of our common stock.

We estimate the fair value of our stock-based awards of options to purchase shares of common stock to employees and non-employees using the Black-Scholes option pricing model, which requires the input of highly subjective assumptions, including (a) the expected stock price volatility, (b) the calculation of the expected term of the award, (c) the risk-free interest rate and (d) expected dividends. Due to the lack of a public market for the trading of our common stock and a lack of company-specific historical and implied volatility data, we have based our estimate of expected volatility on the historical volatility of a group of similar companies that are publicly traded. The historical volatility is calculated based on a period of time commensurate with the expected term assumption. The computation of expected volatility is based on the historical volatility of a representative group of companies with similar characteristics to our company, including stage of product development and life science industry focus. We are a company in a very early stage of product development with no revenue and the representative group of companies has certain similar characteristics. We believe the group selected has sufficient similar economic and industry characteristics, and includes companies that are most representative of our company. We use the simplified method as prescribed by the SEC Staff Accounting Bulletin No. 107, *Share-Based Payment*, to calculate the expected term for options granted to employees as we do not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term. The expected term is applied to the stock option grant group as a whole, as we do not expect substantially different exercise or post-vesting termination behavior among our employee population. For options granted to non-employees, we utilize the contractual term of the arrangement as the basis for the expected term assumption. The risk-free interest rate is based on a treasury instrument whose term is consistent with the expected life of the stock options. The expected dividend yield is assumed to be zero as we have never paid dividends and have no current plans to pay any dividends on our common stock, similar to our peer group. We estimate grant date fair value of restricted stock awards with corresponding promissory notes using the Black-Scholes option pricing model. Post IPO, the grant date fair value of restricted stock award grants without a promissory note and awards of common stock has been based on the estimated value of our common stock at the date of grant.

Our stock-based awards are subject to either service or performance-based vesting conditions. Compensation expense related to awards to employees with service-based vesting conditions is recognized on a straight-line basis based on the grant date fair value over the associated service period of the award, which is generally the vesting term. Consistent with the guidance in ASC 505-50, compensation expense related to awards to non-employees with service-based vesting conditions is recognized on a straight-line basis based on the then-current fair value at each financial reporting date prior to the measurement date over the associated service period of the award, which is generally the vesting term. Compensation expense related to awards to employees with performance-based vesting conditions is recognized based on the grant date fair value over the requisite service period using the accelerated attribution method to the extent achievement of the performance condition is probable. Consistent with the guidance in ASC 505-50, compensation expense related to awards to non-employees with performance-based vesting conditions is recognized based on the then-current fair value at each financial reporting date prior to the measurement date over the requisite service period using the accelerated attribution method to the extent achievement of the performance condition is probable.

We are also required to estimate forfeitures at the time of grant, and revise those estimates in subsequent periods if actual forfeitures differ from our estimates. We use historical data to estimate pre-vesting forfeitures and record stock-based compensation expense only for those awards that are expected to vest. To the extent that actual forfeitures differ from our estimates, the difference is recorded as a cumulative adjustment in the period the estimates were revised. Stock-based compensation expense recognized in the condensed consolidated financial statements is based on awards that are ultimately expected to vest.

In June 2011, certain of our employees purchased shares of our restricted stock in exchange for promissory notes. Although these notes were 50% recourse to the employees, we have accounted for the promissory notes as nonrecourse in their entirety since the promissory notes are not aligned with a corresponding percentage of the underlying shares. Accordingly, we have accounted for the combination of the promissory note and restricted stock as a grant of an option, as the substance is similar to the grant of an option. The exercise price of this stock option is the principal and interest due on the promissory note. The fair value of the stock option is recognized over the requisite service period (not the term of the promissory note) through a charge to compensation cost. The maturity date of the promissory notes reflects the legal term of the stock option for purposes of valuing the award. The outstanding principal and interest on the promissory notes was paid in full during the third quarter of 2014.

Stock-based compensation expense totaled approximately \$1.1 million and \$1.4 million for the three months ended June 30, 2015 and 2014, respectively, and approximately \$2.2 million and \$3.9 million for the six months ended June 30, 2015 and 2014, respectively.

We expect the impact of our stock-based compensation expense for stock options and restricted stock granted to employees and non-employees to grow in future periods due to the potential increases in the fair value of our common stock and the increase in the number of grants as a result of an increase in headcount.

Emerging Growth Company Status

The JOBS Act permits an “emerging growth company” to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We chose to “opt out” of this provision and, as a result, we will comply with new or revised accounting standards as required when they are adopted. This decision to opt out of the extended transition period under the JOBS Act is irrevocable.

Results of Operations

Comparison of the Three Months Ended June 30, 2015 and 2014

	Three months ended		Increase (Decrease)
	June 30, 2015	June 30, 2014	
	(In Thousands)		
Operating expenses:			
Research and development	\$ 7,182	\$ 5,525	\$ 1,657
General and administrative	3,707	2,315	1,392
Total operating expenses	(10,889)	(7,840)	3,049
Loss from operations	(10,889)	(7,840)	3,049
Other income (expense), net	200	222	(22)
Net loss	\$ (10,689)	\$ (7,618)	\$ 3,071

Research and Development Expenses. Research and development expenses were \$7.2 million for the three months ended June 30, 2015, compared to \$5.5 million for the three months ended June 30, 2014, an increase of \$1.7 million. The increase was primarily due to the following:

	(in millions)
Ongoing Phase 2 study for the treatment of anemia in patients undergoing dialysis	\$ 0.4
Completion of Phase 2b study in non-dialysis patients with anemia related to CKD	(1.2)
Preparation of the Phase 3 study in non-dialysis patients with anemia related to CKD	0.4
Regulatory activities	0.3
Other clinical and non- clinical	0.7
Total increase related to the continued development of AKB-6548	0.6
Drug development for AKB-6899	0.7
Manufacture of drug substance and drug product	(0.6)
Headcount and consulting	0.9
Patent costs	0.4
Stock compensation	(0.6)
Other	0.3
Total net increase	\$ 1.7

General and Administrative Expenses. General and administrative expenses were \$3.7 million for the three months ended June 30, 2015, compared to \$2.3 million for the three months ended June 30, 2014. The increase of \$1.4 million was primarily due to the following expense increases: \$0.4 million of wage and personnel-related costs due to increased headcount, \$0.2 million of stock-based compensation, \$0.4 million of professional fees, \$0.2 million in commercial planning costs and \$0.2 million related to facilities.

Other Income, Net. Other income, net, was \$0.2 million for the three months ended June 30, 2015 and June 30, 2014. Other income, net for the three months ended June 30, 2015 is primarily related to \$0.1 million of interest income and \$0.1 million related to reimbursements from Aerpio for employee-related costs. Other income, net for the three months ended June 30, 2014, is primarily related to reimbursements from Aerpio for employee-related costs. Under the terms of the administrative services agreements entered into upon disposition of Aerpio in 2011, we and Aerpio obtain from, and provide to, each other certain services.

Comparison of the Six Months Ended June 30, 2015 and 2014

	Six months ended		Increase (Decrease)
	June 30, 2015	June 30, 2014	
<i>(In Thousands)</i>			
Operating expenses:			
Research and development	\$ 14,687	\$ 11,683	\$ 3,004
General and administrative	7,098	6,066	1,032
Total operating expenses	21,785	17,749	4,036
Loss from operations	(21,785)	(17,749)	4,036
Other income, net	401	434	(33)
Net loss	\$ (21,384)	\$ (17,315)	\$ 4,069

Research and Development Expenses. Research and development expenses were \$14.7 million for the six months ended June 30, 2015, compared to \$11.7 million for the six months ended June 30, 2014, an increase of \$3.0 million. The increase was primarily due to the following:

	<i>(in millions)</i>
Ongoing Phase 2 study for the treatment of anemia in patients undergoing dialysis	\$ 1.2
Completion of Phase 2b study in non-dialysis patients with anemia related to CKD	(2.6)
Preparation of the Phase 3 study in non-dialysis patients with anemia related to CKD	0.5
Other clinical and non-clinical	0.4
Total increase related to the continued development of AKB-6548	(0.5)
Drug development for AKB-6899	1.6
Headcount and consulting	1.7
Patent costs	0.6
Stock compensation	(0.9)
Other	0.5
Total net increase	\$ 3.0

General and Administrative Expenses. General and administrative expenses were \$7.1 million for the six months ended June 30, 2015, compared to \$6.1 million for the six months ended June 30, 2014. The increase of \$1.0 million was primarily due to the following expense increases: \$0.9 million of wage and personnel-related costs due to increased headcount, \$0.5 million in commercial planning costs and \$0.4 million related to insurance and facilities partially offset by the following expense decreases: \$0.7 million of stock-based compensation and \$0.3 million of consulting costs.

Other Income, Net. Other income, net, was \$0.4 million for the six months ended June 30, 2015 and June 30, 2014. Other income, net for the six months ended June 30, 2015 is primarily related to \$0.2 million of interest income and \$0.2 million related to reimbursements from Aerpio for employee-related costs. Other income net for the six months ended June 30, 2014 is primarily related to reimbursements from Aerpio for employee-related costs. Under the terms of the administrative services agreements entered into upon disposition of Aerpio in 2011, we and Aerpio obtain from, and provide to, each other certain services.

Liquidity and Capital Resources

We have incurred losses and cumulative negative cash flows from operations since our inception in February 2007, and as of June 30, 2015, we had an accumulated deficit of \$122.1 million. We anticipate that we will continue to incur losses for at least the next several years. We expect that our research and development and general and administrative expenses will continue to increase and, as a result, we will need additional capital to fund our operations, which we may raise through a combination of equity offerings, debt financings, other third-party funding, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements.

We have funded our operations principally from the sale of common stock and preferred stock. As of June 30, 2015, we had cash and cash equivalents and available for sale securities of approximately \$152.8 million. Cash in excess of immediate requirements is invested in accordance with our investment policy, primarily with a view to liquidity and capital preservation. Accordingly, available for sale securities, consisting principally of corporate and government debt securities and stated at fair value, are also available as a source of liquidity.

Cash Flows

The following table sets forth the primary sources and uses of cash for each of the periods set forth below:

	Six months ended	
	June 30, 2015	June 30, 2014
	(In Thousands)	
Net cash provided by (used in):		
Operating activities	\$ (20,464)	\$ (12,677)
Investing activities	(871)	(17,717)
Financing activities	64,803	104,573
Net increase (decrease) in cash and cash equivalents	<u>\$ 43,468</u>	<u>\$ 74,179</u>

Operating Activities. The net cash used in operating activities was \$20.4 million for the six months ended June 30, 2015 and consisted primarily of a net loss of \$21.4 million adjusted for non-cash items, including stock-based compensation expense of \$2.2 million and amortization of premium/discount on investments of \$0.3 million and a net decrease in operating assets and liabilities of \$1.6 million. The significant items in the change in operating assets and liabilities include decreases in accounts payable and accrued expenses of approximately \$1.0 million and an increase in prepaid expenses and other current assets of \$0.6 million. The decrease in accounts payable and accrued expenses is primarily driven by a reduction in accrued bonus as a result of the payment of the 2014 bonuses in March 2015 and accrued clinical and non-clinical study costs associated with AKB-6548 and AKB-6899, partially offset by an increase in accrued legal costs. The increase in prepaid expenses, other current assets and other assets is primarily related to prepaid clinical and non-clinical study costs associated with AKB-6548 and AKB-6899 and directors and officers insurance.

The net cash used in operating activities was \$12.7 million for the six months ended June 30, 2014 and consisted primarily of a net loss of \$17.3 million adjusted for non-cash items, including stock-based compensation expense of \$3.9 million and a net increase in operating assets and liabilities of \$0.7 million. The significant items in the change in operating assets and liabilities include increases in accounts payable and accrued expense of \$1.6 million, offset by a decrease in prepaid expenses, other current assets and other assets of \$0.9 million. The increase in accounts payable and accrued expenses is driven by professional fees and other public company related costs incurred in connection with our IPO and the decrease in prepaid expenses, other current assets and other assets is primarily related to clinical trial costs related to the initiation of the Phase 2b study in July 2013.

Investing Activities. Net cash used in investing activities for the six months ended June 30, 2015 was \$0.9 million and was comprised primarily of purchases of available for sale securities of \$35.4 million offset by proceeds from the maturities of available for sale securities of \$34.8 million and purchases of equipment of \$0.2 million.

Net cash used in investing activities for the six months ended June 30, 2014 was \$17.7 million and was comprised primarily of purchases of investments of \$24.3 million and purchase of equipment of \$0.2 million, offset by proceeds from the maturities of available for sale securities of \$6.8 million.

Financing Activities. Net cash provided by financing activities for the six months ended June 30, 2015 was \$64.8 million and consisted primarily of net proceeds from the issuance of common stock in connection with our follow-on public offering.

Net cash provided by financing activities for the six months ended June 30, 2014 was \$104.6 million and consisted primarily of \$115.0 million of proceeds from the issuance of common stock in connection with our IPO, partially offset by IPO related costs of \$10.4 million.

Operating Capital Requirements

To date, we have not generated any revenue from product sales. We do not know when, or if, we will generate 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 anticipate that we will continue to generate 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. We are subject to all risks incident to the development and commercialization of novel therapeutics, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. We expect to incur additional costs associated with operating as a public company also, we anticipate that we will need substantial additional funding in connection with our continuing operations.

Our existing cash and cash equivalents and available for sale securities are sufficient to fund our projected operating requirements into the fourth quarter of 2016. However, we may require additional capital for the further development of our existing product candidates and may also need to raise additional funds sooner to pursue other development activities related to additional product candidates. If and until we can generate a sufficient amount of revenue from our products, we expect to finance future cash needs through public or

private equity or debt offerings. There can be no assurance that additional funds will be available to us on acceptable terms or at all. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of one or more of our product candidates. If we raise additional funds through the issuance of additional debt or equity securities, it could result in dilution to our existing stockholders or increased fixed payment obligations, and any such securities may have rights senior to those of our common stock. If we incur indebtedness, we could become subject to covenants that would restrict our operations and potentially impair our competitiveness, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. Any of these events could significantly harm our business, financial condition and prospects.

Our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors. We have based this estimate on assumptions that may be substantially different than actual results, and we could utilize our available capital resources sooner than we currently expect. Our future funding requirements, both near- and long-term, will depend on many factors, including, but not limited to those described under Part II, Item 1A Risk Factors of this Quarterly Report on Form 10-Q.

If we cannot expand our operations or otherwise capitalize on our business opportunities because we lack sufficient capital, our business, financial condition and results of operations could be materially adversely affected.

Contractual Obligations and Commitments

There have been no material changes to our contractual obligations from those described in our Annual Report on Form 10-K that was filed with the SEC on March 4, 2015.

Off-Balance Sheet Arrangements

As of June 30, 2015 we did not have any off-balance sheet arrangements as defined in the rules and regulations of the SEC.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risk related to changes in interest rates. As of June 30, 2015 and December 31, 2014, we had cash and cash equivalents and available for sale securities of \$152.8 million and \$108.9 million, respectively, primarily money market mutual funds consisting of U.S. government debt securities, certificates of deposit and corporate debt securities. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments are in short-term securities. Our investments are subject to interest rate risk and will fall in value if market interest rates increase. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our portfolio.

Item 4. Controls and Procedures

Management's Evaluation of our Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities Exchange Act of 1934 is (1) recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and (2) accumulated and communicated to our management, including our principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

As of June 30, 2015, our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934). Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our principal executive officer and principal financial officer have concluded based upon the evaluation described above that, as of June 30, 2015, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

During the quarter ended June 30, 2015, there have been no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15(d)-15(f) promulgated under the Securities Exchange Act of 1934, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 1. Legal Proceedings

In July 2011, a third party filed an opposition to our issued European Patent No. 2044005, or the '005 Patent. During the oral proceedings, which took place on April 10, 2013, the Opposition Division of the European Patent Office maintained the '005 Patent on the basis of the third auxiliary request filed during the oral proceedings. This decision resulted in the maintenance of a claim directed to a compound chosen from a group of eight compounds, including AKB-6548, as well as claims to compositions and methods for treating various diseases, including, but not limited to, anemia. Both parties have appealed the decision of the Opposition Division and final resolution of the opposition proceedings will likely take a year or more. We cannot be assured of the breadth of the claims that will remain in the '005 Patent or that the patent will not be revoked in its entirety.

In June 2013, the European Patent Office granted European Patent No. 1463823, or the '823 patent, to FibroGen, Inc., or FibroGen. The '823 patent claims, among other things, the use of a heterocyclic carboxamide compound selected from the group consisting of pyridine carboxamides, quinoline carboxamides, isoquinoline carboxamides, cinnoline carboxamides, and beta-carboline carboxamides that inhibits HIF-PH enzyme activity in the manufacture of a medicament for increasing endogenous EPO in the prevention, pretreatment or treatment of anemia. On December 5, 2013, we filed an opposition to the '823 patent requesting that the '823 patent be revoked in its entirety. On July 7, 2015, the European Opposition Division scheduled oral proceedings for March 1, 2016 (later rescheduled to March 8, 2016) and also issued a non-binding preliminary opinion that none of the '823 patent's claims met the requirements for patentability. While, for the reasons set forth in our opposition, we believe the '823 patent should be revoked in its entirety, the ultimate outcome of the opposition remains uncertain. If the European Patent Office decides not to revoke the '823 patent in its entirety, or only certain claims of the '823 patent, and any surviving claims are determined to encompass our intended use of our lead product candidate, we may not be able to commercialize our lead product candidate in the European Union for its intended use, which could materially adversely affect our business, operating results and financial condition.

In August 2011, the Japanese Patent Office granted Japanese Patent No. 4804131, or the '131 patent, to FibroGen. The '131 patent claims, among other things, the use of certain heterocyclic carboxamides selected from the group consisting of pyridine carboxamides, quinoline carboxamides, and isoquinoline carboxamides to treat anemia, wherein the heterocyclic carboxamides also suppress HIF prolyl hydroxylase. On June 2, 2014, we filed an invalidity proceeding in the Japanese Patent Office challenging the validity of the '131 patent and requesting that it be revoked in its entirety. An oral hearing before the Japanese Patent Office was held on February 9, 2015, and on May 11, 2015 the Japanese Patent Office issued a preliminary decision finding all of the challenged claims to be invalid. While, for the reasons set forth in our Request For Trial and subsequent briefing filed in that proceeding, we believe the '131 patent should be revoked in its entirety, the ultimate outcome of the invalidity proceeding remains uncertain. If the Japanese Patent Office decides not to revoke the '131 patent in its entirety, or only certain claims of the '131 patent, and any surviving claims are determined to encompass our intended use of our lead product candidate, we may not be able to commercialize our lead product candidate in Japan for its intended use, which could materially adversely affect our business, operating results and financial condition.

In August 2014, the European Patent Office granted European Patent Nos. 2322153, 2322155, and 1633333, or the '153 patent, the '155 patent, and the '333 patent, respectively, to FibroGen. These related patents claim, among other things, various compounds that either stabilize HIF α or inhibit a HIF hydroxylase or a HIF prolyl hydroxylase for treating or preventing various conditions, including, *inter alia*, iron deficiency, microcytosis associated with iron deficiency, anemia of chronic disease, anemia wherein the subject has a transferrin saturation of less than 20%, anemia refractory to treatment with exogenously administered EPO, and microcytosis in microcytic anemia. On May 13, May 20, and July 6, 2015, we filed oppositions to the '155 patent, the '333 patent, and the '153 patent, respectively, requesting that the patents be revoked in their entireties. While, for the reasons set forth in our oppositions, we believe that the '153 patent, the '155 patent, and the '333 patent should be revoked in their entireties, the ultimate outcomes of the oppositions remains uncertain. If the European Patent Office decides not to revoke the '153 patent, the '155 patent, or the '333 patent in their entireties, or only certain claims of those patents, and any surviving claims are determined to encompass our intended use of our lead product candidate, we may not be able to commercialize our lead product candidate in the European Union for its intended use, which could materially adversely affect our business, operating results and financial condition.

Item 1A. Risk Factors

The following risk factors and other information included in this Quarterly Report on Form 10-Q should be carefully considered. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business. Please reference our "Cautionary Note Regarding Forward-Looking Statements," which identifies certain forward-looking statements contained in this report that are qualified by these risk factors. If any of the following risks occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected.

Risks Related to our Financial Position and Need for Additional Capital

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

We have incurred net losses each year since our inception, including net losses of \$21.4 million for the six months ended June 30, 2015, and \$17.3 million for the six months ended June 30, 2014. As of June 30, 2015, we had an accumulated deficit of \$122.1 million. To date, we have not commercialized any products or generated any revenue from the sale of products, and we do not expect to generate any product revenue in the foreseeable future. We do not know whether or when we will generate revenue or become profitable.

We have devoted most of our financial resources to research and development, including our clinical and preclinical development activities. To date, we have financed our operations primarily through our initial public offering, or IPO completed in March 2014, our follow-on offering completed in April 2015, and private placements of our preferred stock. The amount of our future net losses will depend, in part, on the rate of our future expenditures, and our financial position will depend, in part, on our ability to obtain funding through equity or debt financings, strategic collaborations or grants. Our lead product candidate, AKB-6548, has recently completed a Phase 2b study, and our other product candidate, AKB-6899, is in preclinical development. Therefore, we expect that it will be several years, if ever, before we have a product candidate ready for commercialization. Even if we obtain regulatory approval to market AKB-6548, our future revenue will depend upon the size of any markets in which AKB-6548 has received approval, our ability to achieve sufficient market acceptance, the availability and extent of reimbursement from third-party payors and other factors.

We expect to continue to incur significant expenses and increased operating losses for the foreseeable future. We anticipate that our expenses will increase significantly if and as we:

- complete our Phase 2 clinical development of AKB-6548 for the treatment of anemia in patients undergoing dialysis and prepare for and initiate a Phase 3 development program of AKB-6548 for the treatment of anemia secondary to CKD in patients not on dialysis;
- seek regulatory approvals for our product candidates that successfully complete clinical studies;
- have our product candidates manufactured for clinical trials and for commercial sale;
- establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval;
- initiate additional preclinical, clinical or other studies for additional indications for AKB-6548, AKB-6899 and other product candidates that we may develop or acquire;
- seek to discover and develop additional product candidates;
- acquire or in-license other commercial products, product candidates and technologies;
- make royalty, milestone or other payments under any future in-license agreements;
- maintain, protect and expand our intellectual property portfolio;
- attract and retain skilled personnel; and
- continue to create additional infrastructure to support our operations as a public company.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, if at all, we will be able to achieve profitability. If we are required by the United States Food and Drug Administration, or FDA, the European Medicines Agency, or EMA, or other regulatory authorities to perform studies in addition to, different from or larger than those currently expected, or if there are any delays in completing our clinical trials or the development of any of our product candidates, our expenses could increase.

The net losses we incur may fluctuate significantly from quarter to quarter and year to year, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance. In any particular quarter or quarters, our operating results could be below the expectations of securities analysts or investors, which could cause our stock price to decline.

To become and remain profitable, we must succeed in developing and commercializing our product candidates, which must generate significant revenue. This will require us to be successful in a range of challenging activities, including completing preclinical testing and clinical trials of our product candidates, discovering or acquiring additional product candidates, obtaining regulatory approval for these product candidates and manufacturing, marketing and selling any products for which we may obtain regulatory approval. We are only in the preliminary stages of most of these activities. We may never succeed in these activities and, even if we do, may never generate revenue that is significant enough to achieve profitability.

Even 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 could depress the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, diversify our product offerings or even continue our operations. A decline in the value of our company could cause our shareholders to lose all or part of their investment.

We will require substantial additional financing. A failure to obtain this necessary capital when needed could force us to delay, limit, reduce or terminate our product development or commercialization efforts.

As of June 30, 2015, our cash and cash equivalents and available for sale securities were \$152.8 million. We believe that we will continue to expend substantial resources for the foreseeable future developing AKB-6548, AKB-6899 and any other product candidates that we may develop or acquire. These expenditures will include costs associated with research and development, potentially obtaining regulatory approvals and having our products manufactured, as well as marketing and selling products approved for sale, if any. For example, we anticipate significant costs associated with our Phase 3 clinical study of AKB-6548 for the treatment of anemia secondary to CKD in patients not on dialysis. In addition, other unanticipated costs may arise as a result of our decision to include certain elements in our Phase 3 programs or as a result of our meetings with the FDA and EMA regarding the study design. Because the outcome of our current and anticipated clinical trials is highly uncertain, we cannot reasonably estimate the actual amount of funding necessary to successfully complete the development and commercialization of our product candidates.

Our future capital requirements depend on many factors, including:

- the rate of progress of, results of and cost of completing Phase 2 clinical development of AKB-6548 for the treatment of anemia in patients undergoing dialysis;
- the results of our meetings with the FDA and the EMA and other regulatory authorities and the consequential effect on our study design, study size and resulting operating costs;
- assuming AKB-6548 advances to Phase 3 clinical studies, the scope, design (including the use of an active comparator), size, rate of progress, results and costs of initiating and completing our Phase 3 development programs of AKB-6548;
- assuming favorable Phase 3 clinical results, the cost, timing and outcome of our efforts to obtain marketing approval for AKB-6548 in the United States, Europe and in other jurisdictions, including to fund the preparation and filing of regulatory submissions for AKB-6548 with the FDA, the EMA and other regulatory authorities;
- the scope, progress, results and costs of additional preclinical, clinical, or other studies for additional indications for AKB-6548, AKB-6899 and other product candidates that we may develop or acquire;
- the timing of, and the costs involved in, obtaining regulatory approvals for AKB-6899 if clinical studies are successful;
- the cost and timing of future commercialization activities for our products, if any of our product candidates are approved for marketing, including product manufacturing, marketing, sales and distribution costs;
- the revenue, if any, received from commercial sales of our product candidates for which we receive marketing approval;
- the cost of having our product candidates manufactured for clinical trials and in preparation for commercialization;
- our ability to establish and maintain strategic collaborations, licensing or other arrangements and the financial terms of such agreements;
- the costs involved in preparing, filing and prosecuting patent applications and maintaining, defending and enforcing our intellectual property rights, including litigation costs, and the outcome of such litigation; and
- the extent to which we acquire or in-license other products or technologies.

Based on our current operating plan, and absent any future financings or strategic partnerships, we believe that our existing cash and cash equivalents and available for sale securities at June 30, 2015 will be sufficient to fund our projected operating expenses and capital expenditure requirements into the fourth quarter of 2016. However, our operating plan may change as a result of many known and unknown factors, including those described above, and we may need additional funds sooner than planned. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. Additional funds may not be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available to us on a timely basis, we may be required to delay, limit, reduce or terminate preclinical studies, clinical trials or other development activities for AKB-6548, AKB-6899 or any other product candidates that we develop or acquire, or delay, limit, reduce or terminate our establishment of sales and marketing capabilities or other activities that may be necessary to commercialize our product candidates.

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

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity offerings, debt financings and license, development and commercialization agreements with collaborators. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our common stockholders will be diluted, and the terms may include liquidation or other preferences and anti-dilution protections that adversely affect the rights of our common stockholders. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take certain actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through strategic collaborations with third parties, we may have to relinquish valuable rights to our product candidates, future revenue streams, research programs or product candidates or grant licenses on terms that are not favorable to us. If we are unable to raise additional funds through equity or debt financing when needed, we may be required to delay, limit, reduce or terminate our product development or commercialization efforts for AKB-6548, AKB-6899 or any other product candidates that we develop or acquire, or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

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 commenced active operations in 2007, and our operations to date have been limited to organizing and staffing our company, business planning, raising capital, identifying potential product candidates, undertaking preclinical studies and conducting clinical trials. We currently have two product candidates, one of which is in preclinical development. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. Only a small percentage of biopharmaceutical development programs ultimately result in commercial products or even product candidates and a number of events could delay our development efforts and negatively impact our ability to obtain regulatory approval for, and to manufacture, market and sell, a biopharmaceutical product. We have not yet demonstrated our ability to successfully complete later stage clinical trials, obtain regulatory 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.

In addition, as a relatively young business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. We will need to expand our capabilities to support commercial activities. We may not be successful in adding such capabilities.

Risks Related to our Business and the Clinical Development, Regulatory Review and Approval of AKB-6548 and AKB-6899

We depend heavily on the success of one product candidate, AKB-6548, which has completed a Phase 2b study. Even if we obtain favorable clinical results in our Phase 3 studies when they are initiated, we may not be able to obtain regulatory approval for, or successfully commercialize, AKB-6548.

We currently have only one product candidate, AKB-6548, in clinical development, and our business depends almost entirely on the successful clinical development, regulatory approval and commercialization of that product candidate, which may never occur. We currently have no drug products for sale, generate no revenue from sales of any drugs, and may never be able to develop marketable drug products. AKB-6548, which has completed a Phase 2b study, will require substantial additional clinical development, testing, manufacturing process development, and regulatory approval before we are permitted to commence its commercialization. Our other product candidate, AKB-6899, is in preclinical development. None of our product candidates has advanced into a pivotal study, and it may be years before any such study is initiated. The clinical trials of our product candidates are, and the manufacturing and marketing of our product candidates will be, subject to extensive and rigorous review and regulation by numerous government authorities in the United States and in other countries where we intend to test and, if approved, market any product candidates. Before obtaining regulatory approval for the commercial sale of any product candidate, we must demonstrate through extensive preclinical testing and clinical trials that the product candidate is safe and effective for use in each target indication. This process can take many years. Of the large number of drugs in development in the United States, only a small percentage successfully complete the FDA regulatory approval process and are commercialized. Accordingly, even if we are able to obtain the requisite capital to continue to fund our development and clinical programs, we may be unable to successfully develop or commercialize AKB-6548.

We are not permitted to market AKB-6548 in the United States until we receive approval from the FDA, or in any jurisdiction outside of the United States until we receive the requisite approval from such jurisdiction. As a condition to submitting a New Drug Application, or NDA, to the FDA for AKB-6548 regarding its ability to treat patients with anemia secondary to CKD, we must complete Phase 3 studies and any additional non-clinical or clinical studies required by the FDA. AKB-6548 may not be successful in clinical trials or receive regulatory approval. Further, AKB-6548 may not receive regulatory approval even if it is successful in clinical trials. Obtaining approval of an NDA is a complex, lengthy, expensive and uncertain process that typically takes many years following

the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, the safety concerns associated with injectable rESAs and the black box warnings in their prescribing information may affect the FDA's review of the safety results of AKB-6548. Further, the policies or regulations, or the type and amount of clinical data necessary to gain approval, may change during the course of a product candidate's clinical development and may vary among jurisdictions. We have not obtained regulatory approval for any product candidate and it is possible that AKB-6548 will never obtain regulatory approval. The FDA may delay, limit or deny approval of AKB-6548 for many reasons, including, among others:

- we may not be able to demonstrate that AKB-6548 is safe and effective in treating anemia secondary to CKD to the satisfaction of the FDA;
- the results of our clinical trials may not meet the level of statistical or clinical significance required by the FDA for marketing approval;
- the FDA may disagree with the number, design, size, conduct or implementation of our clinical trials;
- the FDA may not approve the formulation, labeling or specifications we request for AKB-6548;
- the FDA may approve AKB-6548 for use only in a small patient population;
- the FDA may require that we conduct additional clinical trials;
- the contract research organizations, or CROs, that we retain to conduct our clinical trials may take actions outside of our control that materially adversely impact our clinical trials;
- we may fail to perform in accordance with the FDA's good clinical practice, or GCP, requirements;
- the FDA may disagree with inclusion of data obtained from certain regions outside the United States to support the NDA for potential reasons such as differences in clinical practice from United States standards;
- the FDA may disagree with our interpretation of data from our nonclinical studies and clinical trials;
- the FDA may not approve the manufacturing processes or facilities of third-party manufacturers with whom we contract; or
- the policies or regulations of the FDA may significantly change in a manner that renders our clinical data insufficient for approval, or requires us to amend or submit new clinical protocols.

In addition, similar reasons may cause the EMA or other regulatory authorities to delay, limit or deny approval of AKB-6548 outside the United States.

Any of these factors, many of which are beyond our control, could jeopardize our ability to obtain regulatory approval for and successfully market AKB-6548. Because our business is almost entirely dependent upon AKB-6548, any such setback in our pursuit of regulatory approval would have a material adverse effect on our business and prospects.

Alternatively, even if we obtain regulatory approval, that approval may be for indications or patient populations that are not as broad as we intend or desire or may require labeling that includes significant use or distribution restrictions or safety warnings. We may also be required to perform additional, unanticipated clinical trials to obtain approval or be subject to additional post-marketing testing requirements to maintain regulatory approval. In addition, regulatory authorities may withdraw their approval of a product or the FDA may require a risk evaluation and mitigation strategy, or REMS, for a product, which could impose restrictions on its distribution. Any of the foregoing scenarios could materially harm the commercial prospects for AKB-6548 or our other product candidates.

We have not obtained agreement with the FDA, EMA or other regulatory authorities on the design of our Phase 3 development programs.

Although we have recently completed our Phase 2b study, we have not yet obtained agreement with the regulatory authorities on the design of our Phase 3 development program. We have commenced discussions with United States and European regulatory authorities regarding the design of our Phase 3 program. These discussions are ongoing. The elements of our global Phase 3 program will be determined over the course of these discussions, with the goal of harmonizing a single, global Phase 3 program. We expect these discussions to be finalized in the third quarter of this year and that we will begin enrolling patients in our Phase 3 program before the end of 2015.

If the regulatory authorities determine that the Phase 2b study results do not support moving into a pivotal program, we would be required to conduct additional Phase 2 studies. Alternatively, we may choose to include, or regulatory authorities may suggest we include, certain elements in our Phase 3 development programs, such as any or all of the following:

- a larger number of subjects in the program;

- more subjects from certain geographic regions than currently planned;
- a longer course of treatment than our current expectations;
- additional or different endpoints from those currently planned;
- the use of an active comparator rather than a placebo control; or
- the simultaneous submission of Phase 3 data from our studies in dialysis and non-dialysis patients.

If we choose to include some or all of these elements in our Phase 3 development programs, the costs of our AKB-6548 development program could increase materially and the potential market introduction of AKB-6548 could be delayed or we could risk not obtaining regulatory authority approval even if the Phase 3 trials meet their primary endpoints. The regulatory authorities also may require that we conduct additional clinical, nonclinical or manufacturing validation studies and submit that data before it will consider an NDA.

We cannot predict what additional requirements may be imposed by these regulatory authorities or how such requirements might delay or increase costs for our planned Phase 3 development program. Because our business is almost entirely dependent upon the successful development, regulatory approval, and commercialization of AKB-6548, any such delay or increase in costs would have an adverse effect on our business.

We may find it difficult to enroll patients in our clinical studies, which could delay or prevent clinical studies of our product candidates.

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 on the speed at which we can recruit patients to participate in testing our product candidates. Patients may be unwilling to participate in our clinical studies for AKB-6548 because of concerns from adverse events observed with injectable rESAs, other investigational agents and commercial products in CKD or for other reasons, including competitive clinical studies for similar patient populations. In addition, patients controlling their disease with injectable rESAs may be reluctant to participate in a clinical trial with an investigational drug. Finally, competition for clinical trial sites may limit our access to subjects appropriate for studies of AKB-6548. As a result, the timeline for recruiting patients, conducting studies and obtaining regulatory approval of potential products may be delayed. These delays could result in increased costs, delays in advancing our development of AKB-6548 or termination of the clinical studies altogether.

We may not be able to identify, recruit and enroll a sufficient number of patients, or those with required or desired characteristics to achieve diversity in a study, to complete our clinical studies in a timely manner. Patient enrollment is affected by factors including:

- severity of the disease under investigation;
- design of the study protocol;
- size and nature of the patient population;
- eligibility criteria for and design of the study in question;
- perceived risks and benefits of the product candidate under study;
- proximity and availability of clinical study sites for prospective patients;
- availability of competing therapies and clinical studies and clinicians' and patients' perceptions as to the potential advantages of AKB-6548 in relation to available therapies or other products under development;
- efforts to facilitate timely enrollment in clinical studies;
- patient referral practices of physicians; and
- ability to monitor patients adequately during and after treatment.

We may not be able to initiate or continue clinical studies if we cannot enroll a sufficient number of eligible patients to participate in the clinical studies required by regulatory agencies. If we have difficulty enrolling a sufficient number of patients to conduct our clinical studies as planned, we may need to delay, limit or terminate on-going or planned clinical studies, any of which would have an adverse effect on our business.

We may not be able to obtain regulatory approval in some jurisdictions outside of the United States.

We currently expect to seek regulatory approval of AKB-6548 for the treatment of anemia secondary to CKD in major markets outside the United States, including the European Union. Our ability to successfully initiate, enroll and complete a clinical study in any country outside of the United States, should we attempt to do so, is subject to numerous risks unique to conducting business in international markets, including:

- difficulty in establishing or managing relationships with qualified CROs, physicians and clinical trial sites;
- different local standards for the conduct of clinical studies;
- the potential burden of complying with a variety of laws, medical standards and regulatory requirements, including the regulation of pharmaceutical and biotechnology products and treatments; and
- the acceptability of using data obtained from studies conducted in the United States with the EMA and other regulatory authorities outside of the United States.

If we fail to successfully meet requirements for the conduct of clinical trials outside of the United States, we may be delayed in obtaining, or be unable to obtain, regulatory approval for AKB-6548 in countries outside of the United States.

Regulatory authorities outside of the United States will require compliance with numerous and varying regulatory requirements. The approval procedures vary among jurisdictions and may involve requirements for additional testing, and the time required to obtain approval may differ from that required to obtain FDA approval. In addition, in many countries outside the United States, a drug product must be approved for reimbursement before it can be approved for sale in that country. In some cases, the price that we intend to charge for our drug product is also subject to approval. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside of the United States does not ensure approval by regulatory authorities in other countries or by the FDA. However, the failure to obtain approval in one jurisdiction may negatively impact our ability to obtain approval in another jurisdiction. The regulatory approval process in countries outside of the United States may include all of the risks associated with obtaining FDA approval. We may not obtain such regulatory approvals on a timely basis, if at all. We may not be able to file for regulatory approvals and may not receive the necessary approvals to commercialize our product candidates in any market.

Clinical drug development is a lengthy and expensive process with an uncertain outcome, and positive results from the clinical studies of AKB-6548 thus far are not necessarily predictive of the results of any future clinical trials of AKB-6548. If we cannot replicate the positive results observed to date in our Phase 3 clinical trials, we may be unable to successfully develop, obtain regulatory approval for and commercialize AKB-6548.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. Success in preclinical studies may not be predictive of similar results in humans during clinical trials, and successful results from early or small clinical trials may not be replicated in later and larger clinical trials. For example, our encouraging preclinical and clinical results for AKB-6548 thus far do not ensure that the results of any future clinical trials will demonstrate similar results. Our planned Phase 3 development program will enroll a larger number of subjects and will treat subjects for longer periods than our prior trials, which will result in a greater likelihood that adverse events may be observed. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials after achieving positive results in early stage development, and we may face similar setbacks. If the results of our ongoing or future clinical trials for AKB-6548 are inconclusive with respect to efficacy, if we do not meet our clinical endpoints with statistical significance, or if there are safety concerns or adverse events, we may be prevented from or delayed in obtaining marketing approval for AKB-6548.

We do not know whether any of our planned clinical trials will begin on time, need to be redesigned, enroll patients on time or be completed on schedule, if at all.

Clinical trials can be delayed or aborted for a variety of reasons, including delay or failure to:

- obtain regulatory approval to commence a clinical trial;
- reach agreement on acceptable terms with prospective CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- obtain institutional review board, or IRB, approval at each site;
- recruit, enroll and retain patients through the completion of clinical trials;
- maintain clinical sites in compliance with trial protocols through the completion of clinical trials;
- address any patient safety concerns that arise during the course of the trial;
- initiate or add a sufficient number of clinical trial sites; or

- manufacture sufficient quantities of our product candidate for use in clinical trials.

We could encounter delays if a clinical trial is suspended or terminated by us, by the relevant IRBs at the sites at which such trials are being conducted, by the Data Safety Monitoring Board, or DSMB, for such trial or by the FDA or other regulatory authorities. Such authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations, clinical trial site or manufacturing facility by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, changes in laws or regulations, or lack of adequate funding to continue the clinical trial. 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.

Even if we receive regulatory approval for our product candidates, such drug products will be subject to ongoing regulatory review, which may result in significant additional expense. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions, and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.

Any regulatory approvals that we receive for our product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or other conditions of approval, or contain requirements for potentially costly post-marketing studies and surveillance to monitor the safety and efficacy of the drug product. In addition, if the FDA approves any of our product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, as well as continued compliance with current Good Manufacturing Practices, or cGMPs, requirements and GCP requirements for any clinical trials that we conduct post-approval.

Post-approval discovery of previously unknown problems with an approved drug product, including adverse events of unanticipated severity or frequency or relating to manufacturing operations or processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of the drug product, withdrawal of the drug product from the market, or drug product recalls;
- fines, warning letters or clinical holds;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products;
- a Risk Evaluation and Mitigation Strategy (REMS) program; and
- injunctions or the imposition of civil or criminal penalties.

The FDA's policies may change and additional government regulations may be enacted. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or are not able to maintain regulatory compliance, we may lose any marketing approval that may have been obtained and we may not achieve or sustain profitability, which would adversely affect our business.

Risks Related to our Reliance on Third Parties

We rely on third parties to conduct preclinical and clinical studies for our product candidates. If they do not properly and successfully perform their obligations to us, we may not be able to obtain regulatory approvals for our product candidates.

We rely on third-party CROs and other third parties to assist in managing, monitoring and otherwise carrying out our ongoing Phase 2 development of AKB-6548 for the treatment of anemia in patients undergoing dialysis. We expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions and clinical investigators to conduct our clinical trials in the future, including our Phase 3 development program for AKB-6548. As a result, the progress of our Phase 3 clinical studies may be impacted and we may incur significant added costs in identifying, qualifying and contracting with a new CRO. We compete with many other companies for the resources of these third parties. The third parties on whom we rely may terminate their engagements with us, and having to enter into alternative arrangements would delay development and commercialization of our product candidates.

Our reliance on these third parties for research and development activities will reduce our control over these activities but will not relieve us of our responsibilities. For example, the FDA and equivalent regulatory authorities outside of the United States require compliance with regulations and standards, including GCP requirements, for designing, conducting, monitoring, recording, analyzing and reporting the results of clinical trials to ensure that the data and results are credible and accurate and that the rights, integrity and confidentiality of study subjects are protected. Although we rely on third parties to conduct our clinical trials, we are responsible for ensuring that each of these clinical trials is conducted in accordance with its general investigational plan and protocol in compliance with legal and regulatory requirements. Regulatory authorities enforce these GCP requirements through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our CROs or clinical trial sites fail to comply with applicable GCP requirements, the clinical data generated in our clinical trials may be deemed unreliable and the FDA, EMA or other regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP requirements. In addition, our clinical trials must be conducted with product that meets certain specifications and is manufactured under applicable cGMP regulations. Failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

If these third parties do not successfully carry out their duties under their agreements, if the quality or accuracy of the data they obtain is compromised due to their failure to adhere to clinical trial protocols or to regulatory requirements, or if they otherwise fail to comply with clinical trial protocols or meet expected deadlines, the clinical trials of our product candidates may not meet regulatory requirements. If clinical trials do not meet regulatory requirements or if these third parties need to be replaced, preclinical development activities or clinical trials may be extended, delayed, suspended or terminated. If any of these events occur, we may not be able to obtain regulatory approval of our product candidates on a timely basis or at all.

We also expect to rely on other third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or marketing approval of our product candidates or commercialization of our products, resulting in additional losses and depriving us of potential product revenue.

We intend to rely on third parties to conduct some or all aspects of our product manufacturing, and these third parties may not perform satisfactorily.

We do not have any manufacturing facilities and do not expect to independently manufacture our product candidates for research and preclinical and clinical testing. We currently rely, and expect to continue to rely, on third parties to manufacture and supply drug product for our AKB-6548 clinical trials, and we expect to rely on third parties for the manufacture of clinical and commercial quantities of our product candidates. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.

Also, these third parties may terminate their engagement with us. On February 28, 2014, we entered into an agreement with Evonik Corporation, or Evonik, for the manufacture of drug substance for the Phase 3 development program of AKB-6548. If Evonik cannot perform as agreed or terminates their engagement with us, we may be required to find replacement manufacturers. We may incur significant delays and added costs in identifying, qualifying and contracting with any such replacement, as well as producing the drug substance. Also, if we choose to engage a second source for the production of drug substance, we may incur additional costs. We also have arrangements in place for the manufacture of finished drug product for the Phase 3 development program. Although we believe that there are several other manufacturers who also could manufacture our drug product if our current drug product manufacturer cannot perform as agreed or terminates their engagement with us, we may incur significant delays and added costs in identifying, qualifying, and contracting with another manufacturer. In addition, we have to enter into technical transfer agreements and share our know-how with such third-party manufacturers, which can be time-consuming and may result in delays. These delays could result in a suspension of our clinical trials or, if AKB-6548 is approved and marketed, a failure to satisfy patient demand.

Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured the product candidates ourselves, including:

- the inability to negotiate manufacturing agreements with third parties under commercially reasonable terms;
- reduced control as a result of using third-party manufacturers for all aspects of manufacturing activities, including regulatory compliance and quality assurance;
- termination or nonrenewal of manufacturing agreements with third parties in a manner or at a time that is costly or damaging to us;
- the possible misappropriation of our proprietary information, including our trade secrets and know-how; and
- disruptions to the operations of our manufacturers or suppliers caused by conditions unrelated to our business or operations, including the bankruptcy of the manufacturer or supplier or a catastrophic event affecting our manufacturers or suppliers.

Any of these events could lead to clinical study delays or failure to obtain regulatory approval, or affect our ability to successfully commercialize future products. Some of these events could be the basis for FDA action, including injunction, recall, seizure or total or partial suspension of production.

The facilities used by our contract manufacturers to manufacture our product candidates must be approved by the FDA pursuant to inspections that will be conducted prior to or after we submit our NDA to the FDA. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturers for compliance with cGMP requirements for manufacture of both drug substance and finished drug product. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA, we will not be able to secure and/or maintain regulatory approval for our product candidates. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA, EMA or other regulatory authorities do not approve these facilities for the manufacture of our product candidates or if they withdraw any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved. Moreover, 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 the supply of our products or product candidates.

In addition, our product candidates and any products that we may develop may compete with other product candidates and products for access to manufacturing facilities. Certain of these manufacturing facilities may be contractually prohibited from manufacturing our product candidates or products due to exclusivity provisions in agreements with our competitors. 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.

If we are unable to manufacture our product candidates in sufficient quantities and at sufficient yields, we may experience delays in product development, clinical trials, regulatory approval and commercial distribution.

Completion of our clinical trials and commercialization of our product candidates require access to facilities to manufacture our product candidates at sufficient yields and at clinical and commercial scale. We have limited experience manufacturing, or managing third parties in manufacturing, any of our product candidates in the volumes that will be necessary to support large-scale clinical trials or commercial sales. Efforts to establish these capabilities may not meet initial expectations as to scheduling, scale-up, reproducibility, yield, purity, cost, potency or quality.

Our reliance on contract manufacturers may adversely affect our operations or result in unforeseen delays or other problems beyond our control. Because of contractual restraints and the limited number of third-party manufacturers with the expertise, required regulatory approvals and facilities to manufacture our bulk drug substance and drug product on a commercial scale, replacement of a manufacturer may be expensive and time-consuming and may cause interruptions in the production of our product candidates. A third-party manufacturer may also encounter difficulties in production. These problems may include:

- difficulties with production costs, scale-up and yields;
- availability of raw materials and supplies;
- quality control and assurance;
- capacity constraints;
- shortages of qualified personnel;
- compliance with strictly enforced federal, state and international regulations that vary in each country where a product might be sold; and
- lack of capital funding.

Any delay or interruption in our supply of product candidates or products could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may not be successful in establishing and maintaining strategic collaborations which could adversely affect our ability to develop and commercialize our product candidates, negatively impacting our operating results.

We plan to commercialize AKB-6548 ourselves in the United States and will likely seek one or more strategic collaborators to commercialize AKB-6548 in additional markets. We face competition in seeking appropriate collaborators for our product candidates,

and the negotiation process is time-consuming and complex. In order for us to successfully collaborate with a third party on our product candidates, potential collaborators must view these product candidates as economically valuable. Even if we are successful in our efforts to establish strategic collaborations, the terms that we agree upon may not be favorable to us, and we may not be able to maintain such strategic collaborations if, for example, development or approval of a product is delayed or sales of an approved product are disappointing. Any delay in entering into strategic collaboration agreements related to our product candidates could delay the development and commercialization of our product candidates and reduce their competitiveness even if they reach the market.

In addition, our strategic collaborators may terminate any agreements they enter into with us, and we may not be able to adequately protect our rights under these agreements. Furthermore, our strategic collaborators will likely negotiate for certain rights to control decisions regarding the development and commercialization of our product candidates, if approved, and may not conduct those activities in the same manner as we do.

If we fail to establish and maintain strategic collaborations related to our product candidates, we will bear all of the risk and costs related to the development and commercialization of any such product candidate, and we may need to seek additional financing, hire additional employees and otherwise develop expertise. This could negatively affect the development of any such product candidate.

Risks Related to our Intellectual Property

If our efforts to protect our proprietary technologies are not adequate, we may not be able to compete effectively in our market. We are currently involved in an opposition proceeding involving one of our European patents, and the outcome of that proceeding may affect our ability to establish a competitive advantage in the market or successfully commercialize our lead product candidate in the European Union.

We rely upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to our technologies. We will only be able to protect our product candidates, proprietary technologies and their uses from unauthorized use by third parties to the extent that valid and enforceable patents or trade secrets cover them. Any disclosure to or misappropriation by third parties of our confidential proprietary information could enable competitors to quickly duplicate or surpass our technological achievements, thus eroding our competitive position in the market.

In July 2011, a third party filed an opposition to one of our issued European patents, European Patent No. 2044005, or the '005 Patent. During the oral proceedings, which took place on April 10, 2013, the Opposition Division of the European Patent Office decided to maintain certain claims of the patent directed to a compound chosen from a group of eight compounds, including AKB-6548, as well as claims to compositions and methods for treating various diseases including, but not limited to, anemia. Both parties have appealed the decision of the Opposition Division and final resolution of the opposition proceeding will likely take a year or more. We cannot be assured of the breadth of the claims that will remain in the '005 Patent or that the patent will not be revoked in its entirety. If the European Patent Office decides to narrow the scope of the claims or revoke the '005 Patent, we may not be able to establish a competitive advantage in the European Union in our market or successfully commercialize our product candidates in the European Union, which could materially adversely affect our business, operating results and financial condition.

Composition-of-matter patents on the active pharmaceutical ingredient are generally considered to be the strongest form of intellectual property protection for pharmaceutical products, as such patents provide protection without regard to any method of use. Method-of-use patents protect the use of a product for the specified method. A method-of-use patent does not prevent a competitor from making and marketing a product that is identical to our product for an indication that is outside the scope of the patented method. Moreover, even if competitors do not actively promote their product for our targeted indications, physicians may prescribe these products "off-label." Although off-label prescriptions may infringe or contribute to the infringement of method-of-use patents, the practice is common and such infringement is difficult to prevent or prosecute.

The strength of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and can be uncertain. The patent applications that we own or license may fail to result in issued patents in the United States or in other countries. Our competitors have and will continue to undertake formal efforts to oppose the issuance of claims in our patent applications. We do not control decisions made by the United States Patent and Trademark Office, or US PTO or equivalent bodies outside the United States. Even if our patents do successfully issue, third parties may challenge the validity, enforceability, inventorship, or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing around our claims. If the breadth or strength of protection provided by the patents and patent applications we hold with respect to our product candidates is threatened, it could dissuade companies from collaborating with us to develop, and threaten our ability to commercialize, our product candidates. Further, if we encounter delays in our clinical trials, the period of time during which we could market our product candidates under patent protection would be reduced. Since patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we were the first to file any patent application related to our product candidates. Furthermore, for applications in which all claims are entitled to a priority date before March 16, 2013, an interference proceeding can be provoked by a third-party or instituted by the US PTO to determine who was the first to invent any of

the subject matter covered by the patent claims of our applications. For applications containing a claim not entitled to priority before March 16, 2013, there is greater level of uncertainty in the patent law with the passage of the America Invents Act (2011), which brings into effect significant changes to the U.S. patent laws and which introduces new procedures for challenging pending patent applications and issued patents. A primary change under this reform is creating a “first to file” system in the United States. This will require us to be cognizant of the time from invention to filing of a patent application.

In addition to the protection afforded by patents, we seek to rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable, processes for which patents are difficult to enforce and any other elements of our drug discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. Although we require all of our employees to assign their inventions to us, and require all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information or technology to enter into confidentiality agreements, we cannot be certain that our trade secrets and other confidential or proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Furthermore, the laws of some countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, we will not be able to establish or maintain a competitive advantage in the market, which could materially adversely affect our business, operating results and financial condition.

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

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

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets, although our agreements may contain certain limited publication rights. For example, any academic institution that we may collaborate with will usually expect to be granted rights to publish data arising out of such collaboration, provided that we are notified in advance and given the opportunity to delay publication for a limited time period in order for us to secure patent protection of intellectual property rights arising from the collaboration, in addition to the opportunity to remove confidential or trade secret information from any such publication. In the future we may also conduct joint research and development programs that may require us to share trade secrets under the terms of our research and development or similar agreements. Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. A competitor’s discovery of our trade secrets would impair our competitive position and have an adverse impact on our business.

Third-party claims of intellectual property infringement may be costly and time consuming, and may delay or harm our drug discovery and development efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. The pharmaceutical and biotechnology industries are characterized by extensive litigation over patent and other intellectual property rights. We may become a party to, or threatened with, future adversarial litigation or other proceedings regarding intellectual property rights with respect to our drug candidates. As the pharmaceutical and biotechnology industries expand and more patents are issued, the risk increases that our drug candidates may give rise to claims of infringement of the patent rights of others.

While our product candidates are in preclinical studies and clinical trials, we believe that the use of our product candidates in these preclinical studies and clinical trials in the United States falls within the scope of the exemptions provided by 35 U.S.C. Section 271(e), which provides that it shall not be an act of infringement to make, use, offer to sell, or sell within the United States or import into the United States a patented invention solely for uses reasonably related to the development and submission of information to the FDA. As our product candidates progress toward commercialization, the possibility of a patent infringement claim against us increases. We attempt to ensure that our product candidates and the methods we employ to manufacture them, as well as the methods for their use which we intend to promote, do not infringe other parties’ patents and other proprietary rights. There can be no assurance they do not, however, and competitors or other parties may assert that we infringe their proprietary rights in any event.

Third parties may hold or obtain patents or other intellectual property rights and allege in the future that the use of our product candidates infringes these patents or intellectual property rights, or that we are employing their proprietary technology without authorization. For example, we are aware of certain patents that have been acquired by FibroGen directed to certain heterocyclic carboxamide compounds that are described as inhibitors of prolyl-4-hydroxylase. Those patents, however, are believed to have expired as of December 2014.

In addition, we are aware of subsequent U.S. patents issued to FibroGen directed to purportedly new methods of using such previously known heterocyclic carboxamide compounds for purposes of treating or affecting specified conditions. We do not believe these currently issued FibroGen U.S. patents conflict with our intellectual property rights; nor do we make any admission that any of such patents are valid or enforceable. Under U.S. law, a party may be able to patent a discovery of a new way to use a previously known compound, even if such compound itself is patented, provided the newly discovered use is novel and nonobvious. Such a method-of-use patent, however, if valid, only protects the use of a claimed compound for the specified methods claimed in the patent. This type of patent does not prevent persons from using the compound for any previously known use of the compound. Further, this type of patent does not prevent persons from making and marketing the compound for an indication that is outside the scope of the patented method. We are not aware of any valid U.S. patents issued to FibroGen, or any other person, that claim methods of using any of our product candidates for purposes of inhibiting hypoxia-inducible factor prolyl hydroxylases, or HIF-PHs, for the treatment of anemia secondary to CKD.

We have filed opposition proceedings in Europe and invalidity proceedings in Japan challenging the validity of certain patents issued to FibroGen. See Item 1. Legal Proceedings for additional information.

There may be patents of third parties, including FibroGen, of which we are currently unaware with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our drug candidates. Also, because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may infringe. Third parties, including FibroGen, may in the future claim that our product candidates and other technologies infringe upon these patents or others and may challenge our ability to commercialize AKB-6548.

Parties making claims against us may seek and obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize AKB-6548 or AKB-6899. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our product candidates, any molecules formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidate unless we obtained a license under the applicable patents, or until such patents expire or they are finally determined to be held invalid or unenforceable. Similarly, if any third-party patent were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or our intended methods of use, including patient selection methods, the holders of any such patent may be able to block or impair our ability to develop and commercialize the applicable product candidate unless we obtained a license or until such patent expires or is finally determined to be held invalid or unenforceable. We may also elect to enter into a license in order to settle litigation or in order to resolve disputes prior to litigation. Furthermore, even in the absence of litigation, we may need to obtain licenses from third parties to advance our research or allow commercialization of our product candidates. Should a license to a third-party patent become necessary, we cannot predict whether we would be able to obtain a license or, if a license were available, whether it would be available on commercially reasonable terms. If such a license is necessary and a license under the applicable patent is unavailable on commercially reasonable terms, or at all, our ability to commercialize our product candidates may be impaired or delayed, which could in turn significantly harm our business.

Further, defense of infringement claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties or redesign our products, which may be impossible or require substantial time and monetary expenditure.

We are currently involved in opposition and invalidity proceedings and may in the future be involved in lawsuits or administrative proceedings to challenge the patents of our competitors or to protect or enforce our patents, which could be expensive, time consuming, and unsuccessful.

We are currently involved in five opposition proceedings in the European Patent Office and one invalidity proceeding in the Japanese Patent Office. These proceedings may be ongoing for a number of years and may involve substantial expense and diversion of employee resources from our business. In addition, we may become involved in additional opposition proceedings or other legal or administrative proceedings in the future. For more information, see the other risk factors under "Risks Related to Intellectual Property."

Competitors may infringe our patents or misappropriate our trade secrets or confidential information. To counter infringement or unauthorized use, we may be required to file infringement or misappropriation claims, which can be expensive and time-consuming. We may not be able to prevent infringement of our patents or misappropriation of our trade secrets or confidential information,

particularly in countries where the laws may not protect those rights as fully as in the United States. In addition, in an infringement proceeding, a court may decide that a patent of ours is not valid or is unenforceable, or may 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 or defense proceedings could put one or more of our patents at risk of being invalidated, held unenforceable, or interpreted narrowly and could put our patent applications at risk of not issuing. In addition, there may be a challenge or dispute regarding inventorship or ownership of patents or applications currently identified as being owned by or licensed to us. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business.

Various administrative proceedings are also available for challenging patents, including interference, reexamination, *inter partes* review, and post-grant review proceedings before the US PTO or oppositions and other comparable proceedings in foreign jurisdictions. Interference proceedings provoked by third parties or brought by the US PTO may be necessary to determine the priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all. Even if we are successful, participation in interference or other administrative proceedings before the US PTO or a foreign patent office may result in substantial costs and distract our management and other employees.

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

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 on any issued patent are due to be paid to the US PTO and foreign patent agencies in several stages over the lifetime of the patent. The US PTO and various foreign governmental patent agencies also require compliance with a number of procedural, documentary, fee payment (such as annuities) and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, 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. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

We have received confidential and proprietary information from potential collaborators, prospective licensees and other third parties. In addition, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of these third parties or our employees' former employers. We may also be subject to claims that former employees, collaborators or other third parties have an ownership interest in our patents or other intellectual property. We may be subject to ownership disputes in the future arising, for example, from conflicting obligations of consultants or others who are involved in developing our drug candidates. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against these claims, litigation could result in substantial cost and be a distraction to our management and employees.

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

Filing, prosecuting and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive. Consequently, the breadth of our intellectual property rights in some countries outside the United States may be less extensive than those in the United States. In addition, the laws of some countries do not protect intellectual property rights to the same extent as laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other countries. Competitors may use our technologies in countries where we have not obtained patent protection to develop their own products and, further, may infringe our patents in territories where we have patent protection, but enforcement is not as strong as in the

United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in certain countries. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property, particularly those relating to pharmaceutical and biotechnology products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in countries outside of the United States could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Risks Related to Commercialization

Our future commercial success depends upon attaining significant market acceptance of our product candidates, if approved, among physicians, patients, third-party payors and others in the medical community.

Even if we obtain marketing approval for AKB-6548, AKB-6899 or any other product candidates that we may develop or acquire in the future, these product candidates may not gain market acceptance among physicians, third-party payors, patients and others in the medical community. In addition, market acceptance of any approved products depends on a number of other factors, including:

- the efficacy and safety of the product, as demonstrated in clinical trials;
- the clinical indications for which the product is approved and the product label approved by regulatory authorities, including any warnings that may be required on the label;
- acceptance by physicians and patients of the product as a safe and effective treatment and the willingness of the target patient population to try new therapies and of physicians to prescribe new therapies;
- the cost, safety and efficacy of the product in relation to alternative treatments;
- the availability of adequate coverage and reimbursement by third-party payors and government authorities;
- the ability to contract with dialysis providers;
- relative convenience and ease of administration;
- the prevalence and severity of adverse side effects;
- the effectiveness of our sales and marketing efforts; and
- the restrictions on the use of our products together with other medications, if any.

For example, two of the largest operators of dialysis clinics in the United States, DaVita, Inc., or DaVita, and Fresenius Medical Care, or Fresenius, account for more than half of the injectable rESA sales in the U.S. dialysis market and have entered into long-term supply agreements with Amgen Inc., or Amgen, that began in January 2012. We believe that it may be challenging to enter into long or short-term supply agreements with DaVita, Fresenius or other operators of dialysis clinics.

Market acceptance is critical to our ability to generate significant revenue. In addition, any product candidate, if approved and commercialized, may be accepted in only limited capacities or not at all. If any approved products are not accepted by the market to the extent that we expect, we may not be able to generate significant revenue and our business would suffer.

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

We do not have a sales or marketing infrastructure and we have not yet sold, marketed or distributed any of our products. To achieve commercial success for any product for which we obtain marketing approval, we will need to establish a sales and marketing organization or make arrangements with third parties to perform these services.

There are risks involved with establishing our own sales, marketing and distribution capabilities. For example, recruiting and training a sales force are expensive and time consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have

prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

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

- our inability to recruit, train and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to and educate physicians regarding our products;
- our inability to effectively manage a geographically dispersed sales and marketing team;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating a sales and marketing organization.

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

Coverage and reimbursement may be limited or unavailable in certain market segments for any approved products, which could make it difficult for us to sell our products profitably.

Market acceptance and sales of any approved products will depend significantly on the availability of adequate coverage and reimbursement from third-party payors and may be affected by existing and future healthcare reform measures. Government authorities and third-party payors decide which drugs they will pay for and establish formularies and reimbursement levels. Coverage and reimbursement by a third-party payor may depend upon a number of factors, including the third-party payor's determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

Obtaining coverage and reimbursement approval for a product from a government or other third-party payor is a time consuming and costly process that could require us to provide supporting scientific, clinical and cost-effectiveness data for the use of our products to the payor. Additionally, we may be required to enter into contracts with third-party payors to obtain favorable formulary status. We may not be able to provide data sufficient to gain acceptance with respect to coverage and reimbursement. We cannot be sure that coverage or adequate reimbursement will be available for any of our product candidates. Even if we obtain coverage for our product candidates, third-party payors may not establish adequate reimbursement amounts, which may reduce the demand for, or the price of, our products. If reimbursement is not available or limited, we may not be able to commercialize certain of our products. In addition, in the United States third-party payors are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement of new drugs. As a result, significant uncertainty exists as to whether and how much third-party payors will provide reimbursement for newly approved drugs, which in turn will put pressure on the pricing of drugs.

In addition, if AKB-6548 is used in an outpatient dialysis facility, such facilities often receive fixed reimbursement for all dialysis services furnished to patients with end-stage renal disease, or ESRD. For example, Medicare payments to ESRD facilities for such services are based on a prospective payment system known as the basic case-mix adjusted composite payment system. These payments cover a bundle of items and services routinely required for dialysis treatments furnished to Medicare beneficiaries in Medicare-certified ESRD facilities or at their home, including the cost of certain routine drugs such as our product candidates. Patient and provider access to adequate coverage and reimbursement by government and private insurance plans is central to the acceptance of any products for which we receive regulatory approval. We may be unable to sell AKB-6548, if approved, to dialysis providers on a profitable basis if third-party payors reduce their current levels of payment or if our costs of production increase faster than increases in reimbursement levels.

Price controls may be imposed, which may adversely affect our future profitability.

In some countries, particularly member states 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 receipt of marketing approval for a product. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various European Union member states and parallel distribution, or arbitrage between low-priced and high-priced member states, can further reduce prices. In some countries, we may be required to conduct a clinical trial or other studies that compare the cost-effectiveness of our product candidates to other available products in order to obtain or maintain reimbursement or pricing approval. Publication of discounts by third-party payors or government authorities may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be adversely affected.

The impact of recent healthcare reform and other changes in the healthcare industry and in healthcare spending is currently unknown, and may adversely affect our business model.

Our revenue prospects could be affected by changes in healthcare spending and policy in the United States and abroad. We operate in a highly regulated industry and new laws, regulations or judicial decisions, or new interpretations of existing laws, regulations or decisions, related to healthcare availability or method of delivery or payment for healthcare products and services could negatively impact our business, operations and financial condition.

In the United States, the Medicare Prescription Drug, Improvement and Modernization Act of 2003, also called 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. As a result of this legislation and the expansion of federal coverage of drug products, we expect that there will be additional pressure to reduce costs. For example, the Centers for Medicare and Medicaid Services, or CMS, has enacted regulations that reduced capitated payments to dialysis providers. These cost reduction initiatives and other provisions of this legislation could decrease the scope of coverage and the price that we receive for any approved products and could seriously harm our business. While the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policies and payment limitations in setting their own reimbursement rates, and any reduction in reimbursement that results from the MMA may cause a similar reduction in payments from private payors. Similar regulations or reimbursement policies may be enacted in international markets which could similarly impact our business.

In addition, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively PPACA, was enacted in 2010 with a goal of reducing the cost of healthcare and substantially changing the way healthcare is financed by both government and private insurers. The PPACA, among other things, increases the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations, establishes annual fees and taxes on manufacturers of certain branded prescription drugs, and creates a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D. In addition, other legislative changes have been proposed and adopted in the United States since the PPACA was enacted. On August 2, 2011, the Budget Control Act of 2011 created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of up to 2% per fiscal year, which went into effect on April 1, 2013.

It is likely that federal and state legislatures within the United States and governments in other countries will continue to consider changes to existing healthcare legislation. We cannot predict the reform initiatives that may be adopted in the future or whether initiatives that have been adopted will be repealed or modified. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare may adversely affect:

- the demand for any drug products for which we may obtain regulatory approval;
- our ability to set a price that we believe is fair for our products;
- our ability to obtain coverage and reimbursement approval for a product;
- our ability to generate revenue and achieve or maintain profitability; and
- the level of taxes that we are required to pay.

If our product candidates obtain marketing approval, we will be subject to healthcare laws, regulation and enforcement and our failure to comply with those laws could have a material adverse effect on our results of operations and financial conditions.

If we obtain approval for any of our product candidates and begin commercializing them, our operations may be directly, or indirectly through our customers, subject to additional healthcare regulation and enforcement by the federal government, states and governments outside of the United States in which we conduct our business. The laws that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce, or in return for, the purchase or recommendation of an item or service reimbursable under a federal healthcare program, such as the Medicare and Medicaid programs;
- federal civil and criminal false claims laws and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created new federal criminal statutes that prohibit executing a scheme to defraud any healthcare benefit program and making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology and Clinical Health Act, or HITECH, and its implementing regulations, which imposes certain requirements relating to the privacy, security, and transmission of individually identifiable health information;
- the federal physician “sunshine” requirements under PPACA, which requires manufacturers of drugs, devices, biologics, and medical supplies to report annually to CMS information related to payments and other transfers of value to physicians, other healthcare providers, and teaching hospitals, and ownership and investment interests held by physicians and other healthcare providers and their immediate family members;
- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws that may apply to items or services reimbursed by any third-party payor, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the applicable compliance guidance promulgated by the federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. In addition, recent healthcare reforms have strengthened these laws. For example, the PPACA, among other things, amends the intent requirement of the federal anti-kickback and criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it. The PPACA also amended the False Claims Act, such that violations of the anti-kickback statute are now deemed violations of the False Claims Act. To constitute a false claim prior to this amendment, an anti-kickback violation had to be accompanied by a false statement, such as false certification of compliance.

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

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

The development and commercialization of new drug products is highly competitive. Our future success depends on our ability to demonstrate and maintain a competitive advantage with respect to the development and commercialization of our product candidates. Our objective is to develop and commercialize new products with superior efficacy, convenience, tolerability and/or safety. In many cases, the products that we commercialize will compete with existing, market-leading products.

If AKB-6548 is approved and launched commercially, competing drugs may include EPOGEN® and Aranesp®, commercialized by Amgen, Procrit® and Eprex®, commercialized by Johnson & Johnson, and Mircera®, commercialized by Roche Holding Ltd., or Roche. We may face competition from potential new anemia therapies. There are several other HIF product candidates in various stages of active development for anemia indications that may be in direct competition with AKB-6548 if and when they are approved and launched commercially. These candidates are being developed by such companies as FibroGen, in partnership with AstraZeneca

PLC in the United States and China and with Astellas Pharma Inc. in Europe and Asia, Japan Tobacco International, GlaxoSmithKline plc and Bayer HealthCare AG. FibroGen/Astellas Pharma Inc., in particular, is currently in Phase 3 clinical development of its product candidate, FG-4592 (roxadustat). Some of these product candidates may enter the market as early as 2017. In addition, certain companies are developing potential new therapies for renal-related diseases that could potentially reduce rESA utilization and thus limit the market for AKB-6548 if and when it is approved and launched commercially. Other new therapies are in development for the treatment of conditions inclusive of renal anemia, like sotatercept® from Acceleron Pharma Inc, that may impact the market for anemia-targeted treatment.

Since rESAs are biologic products, the introduction of biosimilars into the rESA market in the United States will constitute additional competition for AKB-6548 if we are able to obtain approval for and commercially launch our product. A biosimilar product is a follow-on version of an existing, branded biologic product. The patents for the existing, branded product must expire in a given market before biosimilars may enter that market without risk of being sued for patent infringement. In addition, an application for a biosimilar product cannot be approved by the FDA until 12 years after the existing, branded product was approved under a Biologics License Application, or BLA. The patents for epoetin alfa, an rESA, expired in 2004 in the European Union, and the remaining patents have expired or will expire between 2012 and 2015 in the United States. Several biosimilar versions of rESAs are available for sale in the European Union and biosimilar versions of rESAs are currently being studied in clinical trials in the United States.

Many of our potential competitors have significantly greater financial, manufacturing, marketing, drug development, technical and human resources than we do. Large pharmaceutical companies, in particular, have extensive experience in clinical testing, obtaining regulatory approvals, recruiting patients and manufacturing pharmaceutical products. Large and established companies such as Amgen and Roche, among others, compete in the market for drug products to treat anemia. In particular, these companies have greater experience and expertise in securing government contracts and grants to support their research and development efforts, conducting pre-clinical testing and clinical trials, obtaining regulatory approvals to market products, manufacturing such products on a broad scale and marketing approved products. These companies also have significantly greater research and marketing capabilities than we do and may also have products that have been approved or are in late stages of development, and have collaborative arrangements in our target markets with leading companies and research institutions. Established pharmaceutical companies may also invest heavily to accelerate discovery and development of novel compounds or to in-license novel compounds that could make the product that we develop obsolete. As a result of all of these factors, our competitors may succeed in obtaining patent protection and/or FDA approval or discovering, developing and commercializing products before, or more effectively than, we do. In addition, any new product that competes with an approved product must demonstrate compelling advantages in efficacy, convenience, tolerability and safety in order to overcome price competition and to be commercially successful. If we are not able to compete effectively against potential competitors, our business will not grow and our financial condition and operations will suffer.

Our products may cause undesirable side effects or have other properties that delay or prevent their regulatory approval or limit their commercial potential.

Undesirable side effects caused by our products or even competing products in development that utilize a common mechanism of action could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in the denial of regulatory approval by the FDA or other regulatory authorities and potential product liability claims. We recently completed a Phase 2b study of AKB-6548 for the treatment of anemia secondary to CKD in patients not on dialysis. The incidence of the most common treatment emergent adverse events in the Phase 2b study were well balanced overall between the AKB-6548 and placebo treatment groups. There was a higher incidence of serious adverse events (SAEs) reported in the AKB-6548 treatment group, the most common being renal-related. Serious adverse events deemed to be possibly or probably related to AKB-6548 could have a material adverse effect on the development of our product candidates and our business as a whole. Our understanding of adverse events in future clinical trials of other product candidates may change as we gather more information, and additional unexpected adverse events may be observed in future clinical trials.

If we or others identify undesirable side effects caused by our product candidates either before or after receipt of marketing approval, a number of potentially significant negative consequences could result, including:

- our clinical trials may be put on hold;
- patient recruitment could be slowed, or enrolled patients may not want to complete a clinical trial;
- we may be unable to obtain regulatory approval for our product candidates or regulatory authorities may withdraw approvals of product candidates;
- regulatory authorities may require additional warnings on the label;
- a medication guide outlining the risks of such side effects for distribution to patients may be required;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of our products and could substantially increase commercialization costs.

Risks Related to our Business and Industry

If we fail to attract and keep senior management and key scientific personnel, we may be unable to successfully develop our products, conduct our clinical trials and commercialize our product candidates.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to our success. We are highly dependent on certain members of our senior management. 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. We may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the intense competition among numerous biopharmaceutical companies for similar personnel.

We also experience competition for the hiring of scientific and clinical personnel from universities, research institutions and other biopharmaceutical companies. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may become employed by companies 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.

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

We are exposed to the risk that our employees, independent contractors, principal investigators, CROs, consultants and vendors may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or unauthorized activities that violate (1) FDA regulations, including those laws that require the reporting of true, complete and accurate information to the FDA, (2) quality standards, including Good Laboratory Practices (GLP), GCP and GMP, (3) federal and state healthcare fraud and abuse laws and regulations, (4) laws that require the reporting of true and accurate financial information and data or (5) securities laws and regulations. Specifically, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. It is not always possible to identify and deter misconduct by employees and third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

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

As we seek to advance our product candidates through clinical trials and commercialization, we will need to expand our development, regulatory, manufacturing, marketing and sales capabilities or contract with third parties to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with various strategic collaborators, suppliers and other third parties. Future growth will impose significant added responsibilities on members of management. Our future financial performance and our ability to commercialize AKB-6548, if approved, and any other product candidates and to compete effectively will depend, in part, on our ability to manage any future growth effectively. To that end, we must be able to manage our development efforts and clinical trials effectively and hire, train and integrate additional personnel. We may not be able to accomplish these tasks, and our failure to accomplish any of them could prevent us from successfully growing our company.

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

We face an inherent risk of product liability as a result of the clinical testing of our product candidates and will face an even greater risk if we commercialize any products. For example, we may be sued if any product we develop allegedly causes injury or is found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include

allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability and breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even a successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for 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;
- a diversion of management's time and our resources;
- substantial monetary awards to study participants or patients;
- product recalls or withdrawals, or labeling, marketing or promotional restrictions;
- loss of revenue;
- the inability to commercialize any product candidates that we may develop; and
- a decline in our stock price.

Failure to obtain and retain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of products we develop. We currently carry product liability insurance covering our clinical trials in the amount of \$10 million in the aggregate. Although we maintain product liability insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We will have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts.

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 use and 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 the use of hazardous materials by our employees or consultants, 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 research, 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 Common Stock

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012. As a result, we may take advantage of certain reduced disclosure requirements.

We are an "emerging growth company", as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;

- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and obtaining shareholder approval of any golden parachute payments not previously approved.

Investors may find our common stock less attractive if we continue to rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of these accounting standards until they would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this exemption 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 could be an emerging growth company for up to five years from our initial public offering in March 2014, although circumstances could cause us to lose that status earlier, including if the market value of our common stock held by non-affiliates exceeds \$700 million as of any September 30 before that time or if we have total annual gross revenue of \$1 billion or more during any fiscal year before that time, in which cases we would no longer be an emerging growth company as of the following December 31 or, if we issue more than \$1 billion in non-convertible debt during any three-year period before that time, we would cease to be an emerging growth company immediately.

Our stock price has been and may continue to be volatile, and, as a result you may not be able to resell your shares at or above the public offering price.

Our stock price has been and may continue to be volatile. Since our IPO in March 2014, the price of our common stock as reported on The NASDAQ Global Market has ranged from a low of \$7.27 on May 7, 2015 to a high of \$31.00 on June 20, 2014. The market price of shares of our common stock could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control.

In addition, the stock market has recently experienced significant volatility, particularly with respect to pharmaceutical, biotechnology and other life sciences company stocks. The volatility of pharmaceutical, biotechnology and other life sciences company stocks often does not relate to the operating performance of the companies represented by the stock. As we operate in a single industry, we are especially vulnerable to the factors listed above to the extent that they affect our industry, markets or products. In the past, securities class action litigation has often been initiated against companies following periods of volatility in their stock price. This type of litigation could result in substantial costs and divert our management's attention and resources, and could also require us to make substantial payments to satisfy judgments or to settle litigation.

Our principal stockholders and management own a significant percentage of our stock and will be able to exercise significant influence over matters subject to stockholder approval.

Our executive officers, directors and principal stockholders, together with their respective affiliates, collectively control a majority of our common stock. Accordingly, these stockholders will be able to exert a significant degree of influence over our management and affairs and over matters requiring stockholder approval, including the election of our Board of Directors and approval of significant corporate transactions. This concentration of ownership could have the effect of entrenching our management and/or the Board of Directors, delaying or preventing a change in our control or otherwise discouraging a potential acquirer from attempting to obtain control of us, which in turn could have a material and adverse effect on the fair market value of our common stock.

We are incurring increased costs as a result of being a public company, and our management is required to devote substantial time to new compliance initiatives.

As a newly public company, we are incurring significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act and rules of the SEC and the NASDAQ Global Market have imposed various requirements on public companies including requiring establishment and maintenance of effective disclosure and financial controls. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations have increased and will continue to increase our legal and financial compliance costs and will make some activities more time-consuming and costly.

Provisions in our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders, and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our Amended and Restated Certificate of Incorporation and Amended and Restated By-Laws contain provisions that may have the effect of discouraging, delaying or preventing a change in control of us or changes in our management. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our Board of Directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our Board of Directors. Among other things, these provisions:

- authorize “blank check” preferred stock, which could be issued by our Board of Directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our common stock;
- create a classified Board of Directors whose members serve staggered three-year terms;
- specify that special meetings of our stockholders can be called only by our Board of Directors pursuant to a resolution adopted by a majority of the total number of directors;
- prohibit stockholder action by written consent;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our Board of Directors;
- provide that our directors may be removed only for cause;
- provide that vacancies on our Board of Directors may be filled only by a majority of directors then in office, even though less than a quorum;
- require a supermajority vote of the holders of our common stock or the majority vote of our Board of Directors to amend our Amended and Restated By-Laws; and
- require a supermajority vote of the holders of our common stock to amend the classification of our Board of Directors into three classes and to amend certain other provisions of our Amended and Restated Certificate of Incorporation.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Any provision of our Amended and Restated Certificate of Incorporation, our Amended and Restated By-Laws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

In general, under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-change net operating losses, or NOLs, to offset future taxable income. Our existing NOLs may be subject to substantial limitations arising from previous ownership changes and our ability to utilize NOLs could be further limited by Section 382 of the Code. Future changes in our stock ownership, many of which are outside of our control, could result in an ownership change under Section 382 of the Code. Our NOLs may also be impaired under state law. Accordingly, we may not be able to utilize a material portion of our NOLs. Furthermore, our ability to utilize our NOLs is conditioned upon our attaining profitability and generating U.S. federal taxable income. As described above under “—Risks related to our financial position and need for additional capital,” we have incurred significant net losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future; thus, we do not know whether or when we will generate the U.S. federal taxable income necessary to utilize our NOLs. A full valuation allowance has been provided for the entire amount of our NOLs.

Our Amended and Restated Certificate of Incorporation designates the state or federal courts located in the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our Amended and Restated Certificate of Incorporation provides that, subject to limited exceptions, the state and federal courts located in 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, officers or other employees to us or our stockholders, (3) any action asserting a claim against us arising pursuant to any provision of the Delaware General Corporation Law,

our Amended and Restated Certificate of Incorporation or our Amended and Restated By-Laws or (4) any other action asserting a claim against us that is governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our Amended and Restated Certificate of Incorporation described above. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and employees. Alternatively, if a court were to find these provisions of our Amended and Restated Certificate of Incorporation inapplicable to, or unenforceable with respect to, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business and financial condition.

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

Recent Sales of Unregistered Securities

During the quarter ended June 30, 2015, we did not have any sales of unregistered securities.

Use of Proceeds from Initial Public Offering of Common Stock

On March 25, 2014, we completed the IPO of our common stock and issued and sold 6,762,000 shares of our common stock, including 879,647 shares of common stock sold pursuant to the underwriters' full exercise of their option to purchase additional shares at a public offering price of \$17.00 per share, for aggregate gross proceeds of \$115.0 million. All of the shares issued and sold in the IPO were registered under the Securities Act pursuant to a Registration Statement on Form S-1 (File No. 333-193969), which was declared effective by the SEC on March 19, 2014.

The net proceeds to us, after deducting underwriting discounts of \$8.0 million and offering expenses totaling \$2.5 million, were approximately \$104.4 million. No offering expenses were paid directly or indirectly to any of our directors or officers (or their associates) or persons owning 10.0% or more of any class of our equity securities or to any other affiliates.

There has been no material change in our planned use of the balance of the net proceeds from the offering described in our final prospectus filed with the SEC pursuant to Rule 424(b) under the Securities Act. We invested the funds received in cash equivalents and other investments in accordance with our investment policy, and as of June 30, 2015, the remainder of the net proceeds is included in cash and cash equivalents and available for sale securities.

Item 3. Defaults upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 6. Exhibits.

Exhibits

- 10.1 Master Services Agreement, dated as of June 8, 2015 between Akebia Therapeutics, Inc., and Quintiles, Inc.*
- 31.1 Certification of Principal Executive Officer Required Under Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended.
- 31.2 Certification of Principal Financial Officer Required Under Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended.
- 32.1 Certification of Principal Executive Officer and Principal Financial Officer Required Under Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. 1350.
- 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 Labels Linkbase Document
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document

* Confidential treatment has been granted or requested with respect to portions of this exhibit, which portions have been omitted and filed separately with the Securities and Exchange Commission as part of an application for confidential treatment.

SIGNATURES

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

AKEBIA THERAPEUTICS, INC.

Date: August 11, 2015

By: /s/ John P. Butler
John P. Butler
Chief Executive Officer and President

Date: August 11, 2015

By: /s/ Jason A. Amello
Jason A. Amello
Senior Vice President, Chief Financial Officer and Treasurer

MASTER SERVICES AGREEMENT

THIS MASTER SERVICES AGREEMENT (together with all appendices, attachments and exhibits (the “Agreement”) is made on June 8, 2015 (the “Effective Date”) by and between **AKEBIA THERAPEUTICS, INC.**, a Delaware corporation with an office at 245 First Street, Suite 1100, Cambridge, MA 02142 (“Sponsor”) and **QUINTILES, INC.**, a North Carolina corporation with an office at 4820 Emperor Boulevard, Durham NC 27703 (“Service Provider”).

1. **Agreement Structure.** Service Provider shall assist Sponsor in the conduct of its clinical studies and provide the services set forth in the Work Order(s), defined below and attached hereto (“Services”). This Agreement contains general terms and conditions under which Sponsor will engage Service Provider and under which Service Provider will provide the Services. It is the intention of the parties to work in a collaborative fashion with the goal of enabling early engagement of Service Provider through project forecasting (which may occur prior to protocol finalization), joint planning and early resourcing. Before any Services are provided, Sponsor and Service Provider must complete and execute a description of the work to be performed by Service Provider, in a form mutually agreed by the parties (a “Work Order”). Any Affiliate (as defined in Section 2.4(a) hereof) of Service Provider may enter into a Work Order under this Agreement. Neither Sponsor nor Service Provider is obligated to execute any Work Order. A Work Order may not change any term in this Agreement except as otherwise agreed by the parties.

2. **About Services.**
 - 2.1 **Provision of Services.**
 - (a) Service Provider agrees to use commercially reasonable efforts to provide all Services identified in this Agreement (i) within the time period specified in the relevant Work Order and (ii) in accordance with the highest prevailing industry standards and practices for the performance of similar services.
 - (b) Service Provider will be responsible for tasks described in a responsibilities matrix set forth in the relevant Work Order. For Services involving a transfer of Sponsor’s regulatory obligations to Service Provider, Service Provider will be responsible for those obligations set forth in a separate Transfer of Regulatory Obligations Form. Any transfer of regulatory obligations will be construed as a transfer of obligations in accordance with 21 CFR 312.52 (Transfer of Obligations to Contract Research Organization) and Service Provider shall comply with all reporting obligations set forth therein.
 - (c) Service Provider will designate a “Project Leader” who will be the point of contact for Sponsor regarding Services provided, as well as contacts for administrative and payment matters for those Services. Sponsor will designate a “Sponsor Representative” who will be the point of contact for the Project Leader.
 - (d) Sponsor will establish a senior oversight committee to oversee the conduct of its clinical trials which will include senior representatives of Service Provider and Sponsor (“Governance Committee”). The Governance Committee will meet on a regular basis as determined by the Governance Committee members.
 - 2.2 **Change Notification.** If either party identifies a need to modify a Work Order, such party will notify the other party in writing as soon as reasonably possible by providing written notification substantially in the form set forth in Appendix A (Sample Change Notification) attached hereto that (a) references this Agreement and the underlying Work Order by number and date, and (b) contains a description of the required modifications and their effect on the scope, fees and timelines set forth in the underlying Work Order (the “Change Notification”). The party receiving the Change Notification shall respond within [****] days. No Change Notification will be effective unless and until it has been signed by an authorized representative of each party. Service Provider will continue to work under the existing Work Order until such Change Notification is executed. The Change Notification process set forth in this Section 2.2 may only be used if the change requested results in an increase of fees of [****]. For changes which result in a transfer of regulatory obligations between the parties or increase the fees by [****], the parties shall utilize the Change Order process set forth in Section 2.3 hereof.

2.3 **Change Order.** On a quarterly basis, the parties will agree upon and execute a document substantially in the form set forth in Appendix B (Sample Change Order) attached hereto that incorporates and references all Change Notifications from the previous quarter, as well as any other modifications to the existing Work Orders agreed upon by the parties (the “Change Order”). For [****] Work Orders, Change Orders shall only be used for the reasons described in the Work Order. For Work Order modifications which result in a transfer of regulatory obligations between the parties or which result in an increase of fees greater than [****], the parties shall proceed directly to a Change Order and may not use a Change Notification for approval of such modifications. Neither Sponsor nor Service Provider is obligated to execute any Change Order. No Change Order will be effective unless and until it has been signed by an authorized representative of each party.

2.4 **Subcontracting and Third Parties.**

- (a) **Affiliates.** With Sponsor’s prior written consent, Service Provider may subcontract the performance of specific obligations of Service Provider under a Work Order to an Affiliate (as defined below in this Section) or to a qualified non-Affiliate third party including, but not limited to, consultants and third parties (including all infrastructure vendors); *provided*, that (A) such Affiliate or third party performs those Services in a manner consistent with the terms and conditions of this Agreement; (B) Service Provider remains liable for the performance of such Affiliate or third party; and (C) such Affiliate or third party is qualified per Service Provider’s standard operating procedures (“SOPs”) and their performance is overseen by Service Provider. “Affiliate” means, with respect to either Sponsor or Service Provider, any corporation, company, partnership, joint venture and/or firm which controls, is controlled by or is under common control with Sponsor or Service Provider, as applicable. As used in this Section, “control” means (i) in the case of corporate entities, direct or indirect ownership of more than fifty percent (50%) of the stock or shares having the right to vote for the election of directors (or such lesser percentage that is the maximum allowed to be owned by a foreign corporation in a particular jurisdiction); and (ii) in the case of non-corporate entities, the direct or indirect power to manage, direct or cause the direction of the management and policies of the non-corporate entity or the power to elect more than fifty percent (50%) of the members of the governing body of such non-corporate entity.
- (b) **Third Parties.** If the applicable Work Order provides that Service Provider will enter into agreements with investigators or any other third parties including, but not limited to: Data Monitoring Committees/Data Safety Monitoring Boards, Clinical Events Committees/Endpoint Adjudication Committees, independent laboratories, advisory boards, carriers or delivery services, or to arrange on a pass-through basis for third parties to provide services other than those provided by Service Provider, such as clinical supplies, packaging, preclinical research and pharmaceutical sciences (collectively, “Third Parties”), such Third Parties shall be independent contractors and shall not be considered the employees or agents of Service Provider or Sponsor. The scope and budget for such services to be provided by Third Parties shall be reviewed and approved by Sponsor prior to commencement of such services. If such Third Parties request indemnification for loss or damage, then Sponsor shall negotiate any such indemnification directly with such Third Party.
- (c) **Agreements with Clinical Trial Sites.** Unless otherwise requested by Sponsor or set forth in the applicable Work Order, Sponsor will enter into agreements with investigators and/or clinical trial sites (collectively, “Sites”) and lead negotiations of Clinical Trial Agreements (“CTAs”). Such negotiations will not include negotiations of the budget for such CTA; the applicable Work Order will designate the responsible party for such budget negotiations. Upon Sponsor’s request and in accordance with the applicable Work Order, Service Provider will either (i) support Sponsor in such negotiations as mutually agreed by the parties; (ii) lead such negotiations in certain geographic regions designated by Sponsor and use its own CTA forms on behalf of Sponsor including, without limitation, global, local, industry-specific and site-specific CTA forms; or (iii) perform such Services as otherwise agreed by Service Provider and Sponsor. Service Provider’s responsibilities with respect to Sites shall be limited to those responsibilities specifically set forth in this Agreement or the applicable Work Order. All investigators in Sponsor’s studies shall exercise their own independent medical judgment and shall not be considered employees, agents or subcontractors of Service Provider.

- 2.5 **Regulatory Contacts.** Sponsor will be solely responsible for all contacts and communications with any regulatory authorities with respect to matters relating to the Services or a related study. Unless required by applicable law or regulatory authorities, Service Provider will have no contact or communication with any regulatory authority regarding Services without the prior written consent of Sponsor, which consent will not be unreasonably withheld. Service Provider will notify Sponsor promptly, and in no event later than [****], after Service Provider receives any contact or communication from any regulatory authority relating in any way to Services and will provide Sponsor with copies of any such communication within [****] after Service Provider's receipt of such communication. Unless prohibited by applicable law, Service Provider will consult with Sponsor regarding the response to any inquiry or observation from any regulatory authority relating in any way to Sponsor, the Services, or a related study and will allow Sponsor at its discretion to control and/or participate in any further contacts or communications relating to Services or a related study. Service Provider will comply with all reasonable requests and comments by Sponsor with respect to all contacts and communications with any regulatory authority relating in any way to Sponsor, the Services, or a related study. Sponsor shall notify Service Provider promptly of any FDA or other governmental or regulatory inspection or inquiry concerning the Services or a related study. Sponsor shall reimburse Service Provider for its time and expenses (including reasonable attorney fees and the costs of responding to findings) associated with any inspection, audit or investigation relating to the Services instigated by a governmental authority, unless and to the extent such inspection, audit or investigation finds that Service Provider breached this Agreement or any applicable law or regulation.
- 2.6 **Local Representative.** If Sponsor desires to conduct a study in one or more countries that require a local sponsor or representative (the "Local Representative"): (a) to indemnify Sites for harm caused by the study drug, or (b) otherwise assume primary responsibility for the study drug, its importation, or the study in general, including, without limitation, any procedures required by the protocol, Sponsor may request that Service Provider serve as Local Representative in such countries. If Service Provider agrees that one or more of its Affiliates will act as Local Representative for Sponsor for a particular study, the parties will negotiate and enter into a separate agreement specifying the terms of such Affiliate(s) serving as Sponsor's Local Representative. All such agreements will be reviewed and approved by the parties.
- 2.7 **Legal Representative in European Union.** If neither Sponsor nor its Affiliates are located in the European Union ("EU") and Services will be performed in the EU, Sponsor may request that Service Provider serve as its legal representative in the EU, and, if Service Provider agrees, the parties will negotiate and enter into a separate agreement specifying the terms of such legal representation.
- 2.8 **Audits.** With reasonable notice by Sponsor to Service Provider and during normal business hours, Service Provider will allow Sponsor's employees and representatives (provided such representatives are not direct competitors of Service Provider, and subject to appropriate confidentiality restrictions) and representatives of regulatory authorities to review Service Provider's SOPs and records related to the Services, including financial records, to determine if the Services are being provided in accordance with the Agreement and to inspect the facilities used to render the Services. Such audits shall not exceed [****] days in length and shall not occur more than [****] in a [****] period. If Service Provider maintains that an auditor proposed by Sponsor is a "direct competitor" of Service Provider, the parties will use commercially reasonable efforts to resolve Service Provider's concern and may escalate such issues to the Governance Committee if necessary. In addition, the Project Leader and Sponsor Representative and their designees will participate in meetings to review performance of the Services and to coordinate Services as necessary. The Sponsor Representative, or his or her designee, will also have access at reasonable times to observe the Services in progress or review any and all Records (as defined in Section 5.4 hereof).
- 2.9 **Key Service Provider Personnel.** Matters relating to team stability will be addressed in each applicable Work Order.
3. **Representations and Warranties of Service Provider.** Service Provider represents and warrants as follows:
- 3.1 **Organization of Service Provider.** Service Provider is and will remain a corporation or company duly organized, validly existing and in good standing under the laws of its jurisdiction of organization.
- 3.2 **Enforceability of this Agreement.** The execution and delivery of this Agreement by Service Provider has been authorized by all requisite corporate or company action. This Agreement is and will remain a valid and binding obligation of Service Provider, enforceable in accordance with its terms, subject to laws of general application relating to bankruptcy, insolvency and the relief of debtors.
- 3.3 **Absence of Other Contractual Restrictions.** Service Provider is under no contractual or other obligation or restriction that is inconsistent with Service Provider's execution or performance of this Agreement. Service Provider will not enter into any agreement, either written or oral, that would conflict with Service Provider's responsibilities under this Agreement.

- 3.4 **Qualifications of Service Provider Personnel.** Service Provider has engaged, will engage and will cause its Affiliates involved in rendering Services to engage, a sufficient number of employees and permitted subcontractors including consultants (collectively, “Service Provider Personnel”) with the proper skill, training and experience to provide the Services agreed upon in the relevant Work Order. Before providing Services, all Service Provider Personnel must be subject to binding written agreements with Service Provider under which they (a) have confidentiality obligations with regard to Sponsor’s Confidential Information (as defined in Section 6 below) that are consistent with the terms of this Agreement; and (b) assign and effectively vest in Service Provider any and all rights that such Service Provider Personnel might have in the results of their work without any obligation of Sponsor to pay any royalties or other consideration to such Service Provider Personnel.
- 3.5 **Compliance.** Service Provider will perform all Services with requisite care, skill and diligence, in accordance with all applicable laws, rules, regulations, orders and industry standards. Services will be rendered in accordance with applicable Good Laboratory Practices (GLP), Good Clinical Practices (GCP) and/or Good Manufacturing Practices (GMP), as applicable. In addition, Service Provider will comply with all Sponsor policies and procedures that have been communicated to Service Provider regarding access to, and permitted conduct at, Sponsor’s or its Affiliates’ premises.
- 3.6 **Conflicts with Rights of Third Parties.** The conduct and provision of Services will not violate any patent, trade secret or other proprietary or intellectual property right of any third party.
- 3.7 **Absence of Debarment.** Service Provider, its Affiliates, Service Provider Personnel and each of their respective officers and directors, as applicable: (a) have not been debarred and are not subject to a pending debarment, and will not use in any capacity in connection with Services any person who has been debarred or is subject to a pending debarment, pursuant to section 306 of the United States Food, Drug and Cosmetic Act, 21 U.S.C. § 335a; (b) are not ineligible to participate in any federal and/or state healthcare programs or federal procurement or non-procurement programs (as that term is defined in 42 U.S.C. 1320a-7b(f)); (c) are not disqualified by any government or regulatory authorities from performing specific services, and are not subject to a pending disqualification proceeding; and (d) have not been convicted of a criminal offense related to the provision of healthcare items or services and are not subject to any such pending action. Service Provider will notify Sponsor immediately if Service Provider, its Affiliates, any Service Provider Personnel, or any of their respective officers or directors, as applicable, is subject to the foregoing, or if any action, suit, claim, investigation, or proceeding relating to the foregoing is pending, or to the best of Service Provider’s knowledge, is threatened.
- 3.8 **Anti-Bribery.** Each party will not, and will ensure that each of its Affiliates and each of their respective employees, directors, officers, subcontractors and agents will not, (a) offer, promise or give an advantage to another person, or (b) request, agree to receive or accept a financial or other advantage in violation of any anticorruption laws, rules, regulations and decrees applicable to the respective party, including the United States Foreign Corrupt Practices Act, as amended, the United Kingdom Bribery Act 2010 and any implementing legislation under the OECD Convention Against the Bribery of Foreign Government Officials in International Business Transactions (collectively, “Legislation”). It is each party’s responsibility to be familiar with, and comply with, the provisions of the applicable Legislation. From time to time, at the reasonable request of the other party, each party will confirm in writing that it has complied with its undertaking above and will provide any information reasonably requested by the other party in support of such compliance.

4. **Compensation.**

4.1 **Fees, Invoices, and Reconciliation Reports.**

- (a) **Payment of Fees, Invoices.** Sponsor will pay Service Provider the fees, expenses and pass-through costs in accordance with the budget and payment schedule contained in each Work Order which will include an up-front payment in the applicable Work Order upon execution of the Agreement. Service Provider will send monthly invoices, containing a level of detail as requested by Sponsor and agreed to by Service Provider, to Sponsor for Services and pass-through expenses (including reasonable and customary documentation thereof as agreed by the parties). In addition, Service Provider will endeavor to invoice Sponsor for (i) each milestone payment within [****] days after the end of the month in which such milestone was achieved, (ii) all Services within [****] days after the end of the month in which such Services are performed or, if later, the date of execution of an applicable Change Order that includes such Services, (iii) pass-through expenses originating from third party vendors (excluding Sites) within [****] days after such third party pass-through expenses are incurred, (iv) pass-through expenses originating from Service Provider Personnel within [****] days after the end of the month in which such pass-through expenses are incurred (*i.e.* CRA travel and lodging), and (v) the final invoice for each Work Order within [****] days after the end of the month in which Service Provider completes Services under a Work Order (collectively, “Invoice Due Dates”). For pass-through expenses originating from Sites, Service Provider will use commercially reasonable best efforts to invoice Sponsor within [****] days after such pass-through expenses are incurred. The invoice will be provided in a mutually agreed upon format set forth in the applicable Work Order. Sponsor will pay each undisputed invoice within [****] days of Sponsor’s receipt of such invoice.

- (b) **Reconciliation Reports.** Service Provider will provide Sponsor with a reconciliation report for Sponsor’s forecasting purposes detailing all outstanding unbilled costs, including, without limitation, pass-through expenses, at the end of each month in a form mutually agreed upon by the parties (the “Reconciliation Report”). The form of the Reconciliation Report shall be consistent with the bid grid for the applicable Work Order and attached thereto.
- 4.2 **Disputed Invoices and Late Payments.** For any disputed invoices or the disputed portion of an invoice, Sponsor will use reasonable efforts to provide Service Provider the reason for such dispute [****] days of the receipt of such invoice. Upon request, Service Provider will provide reasonable back-up documentation in support of the disputed invoice or disputed portion thereto. The parties will use commercially reasonable efforts through the Governance Committee to resolve such dispute and in accordance with Section 9.10. Service Provider reserves the right to impose, and Sponsor agrees to pay if imposed by Service Provider, interest from the due date of the invoice in an amount equal to [****] per month (or the maximum lesser amount permitted by law) of all undisputed amounts owing hereunder which are outstanding [****] or more days from the due date of the invoice.
- 4.3 **Payment to Service Provider Personnel.** If compensation to Service Provider Personnel under a Work Order is rate-based, Service Provider shall provide a rate schedule describing the various categories of Service Provider Personnel available to perform the Services hereunder and the applicable rates for each such category as well as any available fixed fee project-based Services offered by Service Provider. Service Provider’s standard labor rates are subject to change on January 1 of each calendar year (the “Yearly Rates”). The Yearly Rates will be effective for all Work Orders and associated Change Orders under this Agreement executed on or after January 1 of the particular calendar year. For projects that span multiple years, Service Provider shall utilize the then-current Yearly Rates in effect at the time the Work Order is executed to determine the budget associated with the Work Order, such budget to be inclusive of inflation to account for activities that occur beyond the first calendar year of a study. Furthermore, Service Provider shall not [****] for [****] to perform Services for the Sponsor [****] during the term of the applicable Work Order.
- 4.4 **Taxes.** It shall be Service Provider’s sole obligation to report all compensation received by Service Provider hereunder for Services as may be required by applicable law or regulation. Sponsor shall pay all sales and use taxes, including all applicable goods and services tax, value added tax, local taxes, applicable duties, electronic delivery taxes, excise taxes, levies and import fees (collectively, “Taxes”) that are imposed by legislation in connection with the provision of Services and that are not recoverable by Service Provider. All fees set forth in a Work Order are exclusive of Taxes. Where Taxes are paid by Service Provider, Service Provider will provide an invoice showing the Taxes included. Where any Taxes are paid directly to a tax authority or government by Sponsor, Sponsor shall not deduct this amount from any amount due to Service Provider.
- 4.5 **Payments to Sites.** If Service Provider will be paying Sites on behalf of Sponsor: (a) Service Provider will only pay Sites from advance payments received from Sponsor, specifically designated for this purpose, and identified in the applicable Work Order budget (“Pre-payments”), (b) Service Provider will not be responsible for delays in a study to the extent that such delays are caused by Sponsor’s failure to make such Pre-payment, and (c) such Pre-payments to Sites will be independent from payments to Service Provider for its Services. When Sponsor must publicly report to certain government or regulatory authorities information regarding payments or transfers of value made to certain healthcare professionals by or on behalf of Sponsor to comply with applicable law, Service Provider will prepare and submit financial reports to Sponsor on a quarterly basis in a mutually agreeable format.
- 4.6 **Currency.** The currency to be used for invoice and payment shall be United States dollars (“USD”) (the “Contracted Currency”). The budget or table attached to the applicable Work Order must set out the budgeted costs in all relevant currencies associated with a given Work Order, including the Contracted Currency. If the conversion rate between the local currencies and the Contracted Currency has fluctuated [****] since the budget was prepared, Service Provider will calculate a foreign currency exchange adjustment. The foreign currency adjustment will be calculated and recorded [****] by comparing the foreign currency exchange rate stated in the budget or table attached to the Work Order to the Oanda (www.Oanda.com) average rate over the preceding [****]. Any resulting decrease in costs will be credited and any resulting increase in costs will be invoiced in February of each year. If Service Provider incurs pass-through costs in a currency other than the Contracted Currency, then Sponsor shall reimburse Service Provider for Service Provider’s actual costs in the Contracted Currency based on the Oanda foreign currency exchange rate (www.Oanda.com) for the applicable currencies on the last business day of the month immediately preceding the month in which such pass-through costs are submitted.

5. **Proprietary Rights.**

- 5.1 **Materials.** All documentation, information, and biological, chemical or other materials controlled by Sponsor and furnished to Service Provider by or on behalf of Sponsor including, without limitation, study drug (collectively, with all associated intellectual property rights, the “Materials”) will remain the exclusive property of Sponsor. Service Provider will use Materials only as necessary to perform Services. Service Provider will not analyze Materials except as necessary to perform Services and will not transfer or make the Materials available to third parties without the prior written consent of Sponsor.
- 5.2 **Deliverables.**
- (a) **Ownership.** Sponsor will own all rights throughout the world to all inventions, discoveries, improvements, ideas, processes, formulations, products, computer programs, works of authorship, databases, trade secrets, know-how, information, data, documentation, reports, research, creations and all other products and/or materials arising from or made in the performance of Services (whether or not patentable or subject to copyright or trade secret protection) (collectively, with all associated intellectual property rights, the “Deliverables”). Service Provider will assign and does assign to Sponsor all right, title and interest in and to all Deliverables and will promptly disclose to Sponsor all Deliverables. For purposes of the copyright laws of the United States, Deliverables constitute “works made for hire,” except to the extent such Deliverables cannot by law be “works made for hire.”
 - (b) **Cooperation.** During and after the term of the Agreement, Service Provider will, and will cause its Affiliates and Service Provider Personnel to, (i) cooperate fully in obtaining patent and other proprietary protection for any patentable or protectable Deliverables, all in the name of Sponsor and at Sponsor’s cost and expense; and (ii) execute and deliver all requested applications, assignments and other documents, and take such other measures as Sponsor reasonably requests, in order to perfect and enforce Sponsor’s rights in the Deliverables.
 - (c) **Service Provider Property.** Notwithstanding the foregoing, Service Provider will retain full ownership rights in and to all templates, programs, methodologies, know-how, trade secrets, patents, processes, the “Infosario” platform, the “Outcome” platform and other technologies and other materials developed by or for Service Provider and its Affiliates, including any improvements, modifications and enhancements thereto (collectively, with all associated intellectual property rights, the “Service Provider Property”), regardless of whether such Service Provider Property is used in connection with Service Provider’s performance of its obligations under this Agreement. For the avoidance of doubt, Service Provider Property shall not include any Materials or Deliverables. Service Provider will grant and does grant to Sponsor and its Affiliates a perpetual, non-exclusive, fully paid-up, worldwide license to use Service Provider Property as required for Sponsor and its Affiliates to use the Deliverables.
- 5.3 **Work at Third Party Facilities.** Service Provider agrees not to accept or use any funds, space, personnel, facilities, equipment or other resources of a third party in performing Services or take any other action that could result in a third party owning or having a right in any Deliverables.
- 5.4 **Records; Records Storage.** Service Provider shall maintain all materials, data and documentation obtained or generated by Service Provider arising from or relating to the Services, including computerized records and files (collectively, the “Records”), in a secure area reasonably protected from fire, theft and destruction. All Records will be the property of Sponsor. Service Provider will not transfer, deliver or otherwise provide any Records to any party other than Sponsor or its Affiliates, without the prior written approval of Sponsor. Service Provider shall maintain a disaster recovery plan, and Sponsor shall have an opportunity to review such plan. For the avoidance of doubt, if Service Provider uses a Third Party to perform these Services, such Third Party shall be subject to the provisions of Section 2.4 hereof.
- 5.5 **Record Retention.** At the conclusion of the applicable Work Order, Service Provider will promptly deliver Records to Sponsor or its designee, or dispose of the Records if so directed by Sponsor, unless the Records are required to be retained by Service Provider by applicable law or regulation or for insurance purposes. In no event will Service Provider dispose of any Records without first giving Sponsor sixty (60) days’ prior written notice of its intent to do so.

6. Confidential Information.

- 6.1 **Definition.** “Confidential Information” means any and all (a) scientific, technical, financial or business information, or data, inventions or discoveries (whether patentable or copyrightable or not), (b) trade secrets or (c) proprietary information, ideas, gene sequences, cell lines, samples, media, chemical compounds, assays, biological materials, techniques, sketches, drawings, work of authorship, models, inventions, know-how, processes, apparatuses, equipment, algorithms, software programs, software source documents, and formulas related to the current, future and proposed products and services of each of the parties and including, without limitation, their respective information concerning research, experimental work, development, design details and specifications, engineering, financial information, procurement requirements, purchasing, manufacturing, customer lists, clinical and scientific resources used, investors, employees, business and contractual relationships, business information and forecasts, sales, marketing plans and information a party may provide in whatever form (written, oral or visual) that is (i) furnished or made available by one party (the “Discloser”) to the other (the “Recipient”) or (ii) developed by Service Provider arising from or relating to the Services, in each case, regardless of whether such information is identified as proprietary or confidential at the time of disclosure. Confidential Information of Sponsor includes, without limitation, (A) Materials, Deliverables and Records; (B) development and marketing plans, regulatory and business strategies, financial information, and forecasts of Sponsor; (C) all information of third parties that Sponsor has an obligation to keep confidential; and (D) any information relating to the Sponsor’s study drug and other product candidates, clinical study, protocol, and this Agreement.
- 6.2 **Obligations.** During the term of this Agreement and for a period of ten (10) years thereafter (and in the case of trade secrets, until such time as Discloser no longer treats such information as a trade secret), Recipient agrees to (a) hold in confidence all Discloser’s Confidential Information, and not disclose Discloser’s Confidential Information, except as expressly provided in Section 6.4, without the prior written consent of Discloser; (b) use Discloser’s Confidential Information solely to carry out Recipient’s rights or obligations under this Agreement; (c) treat Discloser’s Confidential Information with the same degree of care Recipient uses to protect Recipient’s own confidential information but in no event with less than a reasonable degree of care; and (d) reproduce Discloser’s Confidential Information solely to the extent necessary to carry out Recipient’s rights or obligations under this Agreement, with all such reproductions being considered Discloser’s Confidential Information.
- 6.3 **Data Protection.**
- (a) The parties shall treat all individually-identifiable health information as Confidential Information in accordance with all applicable laws including, without limitation, the regulations of the Health Insurance Portability and Accountability Act of 1996, as amended from time to time, and any regulation and official guidelines (as amended from time to time) promulgated under that Act (“HIPAA”), the European Union Directive 95/46/EC (the “Directive”) of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and any local jurisdiction data protection legislation enacting the Directive as appropriate, and other analogous local requirements. Service Provider will monitor Sites in accordance with applicable data protection laws.
 - (b) Service Provider shall at all times abide by all applicable privacy laws and regulations and its privacy policies. If the Services will involve the collection or processing of personal data (as defined by applicable data protection legislation) within the European Economic Area (“EEA”), then Sponsor shall serve as the controller of such data, as defined by the Directive, and Service Provider shall act only under the instructions of the Sponsor in regard to personal data. If Sponsor is not based in the EEA, Sponsor must appoint a third party to act as its local data protection representative or arrange for a co-controller established in the EU for data protection purposes in order to comply with the Directive.
- 6.4 **Permitted Disclosures.** Recipient may provide Discloser’s Confidential Information solely to its employees or contractors (but if Recipient is Service Provider, then solely to Service Provider Personnel who are in compliance with Section 3.4 hereof) on a need-to-know basis and solely as necessary to carry out Recipient’s rights or obligations under this Agreement; *provided*, that Recipient remains liable for the compliance of such employees or contractors (or if Service Provider is Recipient, the compliance of such Service Provider Personnel) with the terms of this Agreement. If Recipient is required by a governmental authority or by order of a court of competent jurisdiction to disclose any of Discloser’s Confidential Information, Recipient will give Discloser prompt written notice of such requirement or order and Recipient will take all reasonable and lawful actions to avoid or minimize the degree of such disclosure. Recipient will cooperate reasonably with Discloser in any efforts to seek a protective order.

6.5 **Exceptions.** Recipient's obligations of non-disclosure and non-use under this Agreement will not apply to any portion of Discloser's Confidential Information that Recipient can demonstrate, by competent proof:

- (a) is generally known to the public at the time of disclosure or becomes generally known through no wrongful act on the part of Recipient;
- (b) is in Recipient's possession at the time of disclosure other than as a result of Recipient's breach of any legal obligation;
- (c) becomes known to Recipient on a non-confidential basis through disclosure by sources other than Discloser having the legal right to disclose such Confidential Information; or
- (d) is independently developed by Recipient without reference to or reliance upon Discloser's Confidential Information.

7. **Indemnification, Insurance and Remedies.**

7.1 **Indemnification by Service Provider.** Service Provider will indemnify, defend and hold harmless Sponsor, its Affiliates, and its and their respective officers, directors, employees and agents (collectively, the "Sponsor Indemnitees") against any third party claims, including [****] those claims, to the extent such claims arise out of or relate to (a) [****] performance of Services; (b) any Service Provider Indemnitee's [****] in performing obligations under this Agreement; (c) [****] as described in Section [****] hereof; or (d) Service Provider's breach of its obligations under this Agreement; *provided, however*, that Service Provider shall not indemnify Sponsor under this Section 7.1 for third party claims that result from (i) Sponsor's breach of this Agreement; (ii) a Sponsor Indemnitee's [****]; or (iii) a Site's [****].

7.2 **Indemnification by Sponsor.** Sponsor will indemnify, defend and hold harmless Service Provider, its Affiliates, and its and their respective officers, directors, employees and agents (collectively, the "Service Provider Indemnitees") against any third party claims [****] those claims, to the extent such claims arise out of or relate to (a) [****] relating to or contained in the Deliverables; (b) any Sponsor Indemnitee's [****] in performing obligations under this Agreement; (c) [****]; (d) Sponsor's breach of its obligations under this Agreement; or (e) [****]; *provided, however*, that Sponsor shall not indemnify Service Provider under this Section 7.2 for third party claims that result from [****].

7.3 **Indemnification Procedures.** Each party must notify the other party within ten (10) days after receipt of any claims made for which the other party might be liable under Section 7.1 or 7.2, as applicable. The indemnifying party will have the sole right to defend, negotiate, and settle such claims. The indemnified party will be entitled to participate in the defense of such matter and to employ counsel at its expense to assist in such defense; *provided, however*, that the indemnifying party will have final decision-making authority regarding all aspects of the defense of the claim. The indemnified party will provide the indemnifying party with such information and assistance as the indemnifying party may reasonably request, at the expense of the indemnifying party. Neither party will be responsible or bound by any settlement of any claim nor suit made without its prior written consent; *provided, however*, that the indemnified party will not unreasonably withhold or delay such consent. In the event that either party or any of its Affiliates, and its and their employees or agents, is served with or becomes subject to any subpoena, order, judgment, discovery, proceeding, enforcement or other legal process relating to the actions or alleged misconduct of the other party (a "Legal Proceeding"), and which Legal Proceeding seeks disclosure of any documents or information, then the other party shall bear and/or reimburse the responding party for all reasonable third party fees, costs and expenses including reasonable attorneys' fees associated with such Legal Proceeding. The foregoing expense reimbursement shall not apply to Legal Proceedings for which either party has an indemnification obligation under Sections 7.1 or 7.2 above.

7.4 **Insurance.** Service Provider and Sponsor will carry, with financially sound and reputable insurers, insurance coverage (including workers' compensation at or above the applicable statutory limits, comprehensive liability coverage with contractual liability, and professional liability/errors and omissions coverage and, in the case of Sponsor, clinical trials and/or product liability coverage of not less than [****] dollars [****]) with respect to the conduct of its business against loss from such risks and in such amounts as is customary for well-insured companies engaged in similar businesses and sufficient to support its obligations under this Agreement. Upon the request of the insured party, the insuring party will provide the insured party with a Certificate of Insurance evidencing such coverage, and thirty (30) days advance written notice will be given to insured party of any material change or cancellation in coverage or limits.

7.5 **Remedies; Consequential Damages; Damages Cap.** In the event that any Services do not meet the specifications or other performance criteria agreed to by Service Provider and Sponsor in writing, then Service Provider will, at Sponsor's option, promptly [****]; or (b) refund to Sponsor all amounts paid by Sponsor to Service Provider in connection with such Services, subject to the aggregate limitation of liability below. The provisions of this Section 7.5 are not exclusive, and Sponsor may seek any other right or remedy that it may have under this Agreement or otherwise. Neither party, their Affiliates nor any of their respective directors, officers, employees, subcontractors or agents shall have any liability (including, without limitation, contract, negligence and tort liability) for any loss of profits, opportunities or goodwill or any type of indirect or consequential damages in connection with this Agreement or any Work Order or the Services. Except in connection with a party's indemnification obligation hereunder, in no event shall the collective, aggregate liability (including, without limitation, contract, negligence and tort liability) of either party or its Affiliates, directors, officers, employees, subcontractors or agents under this Agreement [****] the amount of [****] including, without limitation, [****]. For the avoidance of doubt, [****].

8. **Expiration and Termination.**

8.1 **Expiration.** This Agreement will expire on the later of (a) three (3) years from the Effective Date or (b) the completion of all Services under all Work Orders executed by the parties. This Agreement may be extended by mutual agreement of the parties or earlier terminated in accordance with Section 8.2 or 8.3.

8.2 **Termination by Sponsor.** In the event of a material breach of this Agreement by Service Provider, Sponsor may terminate this Agreement or any Work Order upon [****] days written notice if such breach has not been substantially cured within the [****] day period. Further, Sponsor may terminate this Agreement or a Work Order at any time upon [****] days' prior written notice to Service Provider.

8.3 **Termination by Service Provider.** Service Provider may terminate this Agreement or any Work Order if Sponsor fails to cure a material breach of this Agreement or of a Work Order within [****] days after receiving written notice from Service Provider of such breach.

8.4 **Effect of Termination or Expiration.** Upon termination or expiration of this Agreement, neither Service Provider nor Sponsor will have any further obligations under this Agreement, or in the case of termination or expiration of a Work Order, under that Work Order, except that:

- (a) Service Provider will wind down and terminate all affected Services in progress in an orderly manner as soon as practical using best efforts to minimize further costs and in accordance with a schedule agreed to by Sponsor, unless Sponsor specifies in the notice of termination that Services in progress should be completed and Service Provider agrees to complete such Services;
- (b) Service Provider will deliver to Sponsor or, at Sponsor's option, dispose of, any Materials in its possession or control and all Deliverables developed through termination or expiration;
- (c) Sponsor will pay Service Provider any monies due and owing Service Provider, up to the time of termination or expiration, for Services properly performed and all authorized expenses actually incurred (as specified in the applicable Work Order). In addition, Sponsor shall pay Service Provider for time spent by Service Provider Personnel to complete activities associated with the termination and close-out of the Services, including the fulfillment of any regulatory requirements;
- (d) Service Provider will promptly refund any monies paid in advance by Sponsor for Services not rendered;
- (e) Each Recipient will promptly return to the Discloser all of Discloser's Confidential Information (including all copies) provided to Recipient under this Agreement or under any Work Order which has been terminated or has expired, except for one (1) copy which Recipient may retain solely to monitor Recipient's surviving obligations of confidentiality and non-use and, in the case of Sponsor, to exercise all surviving rights of Sponsor under this Agreement; and
- (f) The terms and conditions under Sections 2.4, 2.5, 2.8, 3, 4.1, 4.2, 4.4, 4.6, 5, 6, 7, 8.4 and 9 will survive any such termination or expiration.

9. **Miscellaneous.**

- 9.1 **Independent Contractor.** Service Provider is an independent contractor and not an agent or employee of Sponsor. Service Provider will not in any way represent itself to be an agent, employee, partner or engaged in a joint venture of or with Sponsor, and Service Provider has no authority to obligate or bind Sponsor by contract or otherwise. Service Provider has full power and authority to determine the means, manner and method of performance of Services. Service Provider is responsible for, and will withhold and/or pay, any and all applicable federal, state or local taxes, payroll taxes, workers' compensation contributions, unemployment insurance contributions, or other payroll deductions from the compensation of Service Provider's employees and other Service Provider Personnel and no such employees or other Service Provider Personnel will be entitled to any benefits applicable to or available to employees of Sponsor.
- 9.2 **Publicity.** Except to the extent required by applicable law or regulation or the rules of any stock exchange or listing agency, neither party will make any public statement or release concerning this Agreement or the transactions contemplated by this Agreement or use the other party's name or the name of such party's Affiliates in any form of advertising, promotion or publicity, without obtaining prior written consent from the other party; *provided, however*, nothing in this Section 9.2 shall be construed to prohibit Sponsor from making any public statement regarding the design, progress, status, data, and results of any of its studies.
- 9.3 **Notices.** All notices must be in writing and sent to the address for the recipient set forth below or at such other address as the recipient may specify in writing under this procedure. All notices must be given (a) by personal delivery, with receipt acknowledged; (b) by prepaid certified or registered mail, return receipt requested; (c) by prepaid recognized express delivery service; or (d) by electronic mail with confirmation of delivery and receipt. Notices will be effective upon receipt or at a later date stated in the notice.

To Sponsor: Akebia Therapeutics, Inc.
245 First Street
Suite 1100
Cambridge, MA 02142
Attention: Chief Medical Officer
cc: General Counsel

To Service Provider: Quintiles, Inc.
4820 Emperor Blvd.
Durham, NC 27703
Attention: Office of General Counsel

- 9.4 **Assignment.** Except as expressly provided in Section 2.4 hereof, Service Provider may not assign, delegate or transfer its obligations under this Agreement, in whole or in part, without the prior written consent of Sponsor, and any attempted assignment, delegation or transfer by Service Provider without such consent will be void. Sponsor may not assign, delegate or transfer this Agreement in whole or in part without consent of Service Provider. No assignment, delegation or transfer will relieve either party of the performance of any accrued obligation that such party may then have under this Agreement.
- 9.5 **Entire Agreement.** This Agreement, and any fully-signed Work Orders, Change Orders or Change Notifications as well as the sample Work Order mutually agreed upon by the parties, each of which are incorporated into this Agreement, constitute the entire agreement between the parties with respect to the specific subject matter of this Agreement and all prior agreements, oral or written, with respect to such subject matter are superseded, *provided, however*, that the provisions of such agreements intended to survive following expiration or termination shall survive in accordance with their terms. Each party confirms that it is not relying on any representations or warranties of the other party except as specifically set forth in this Agreement. If there is any conflict, discrepancy or inconsistency between the terms of this Agreement and any Work Order, Change Order or Change Notification, purchase order or other form used by the parties, the terms of this Agreement will control.
- 9.6 **No Modification.** This Agreement may be changed only by a writing signed by authorized representatives of each party.

- 9.7 **Severability; Reformation.** Each provision in this Agreement is independent and severable from the others, and no provision will be rendered unenforceable because any other provision is found by a proper authority to be invalid or unenforceable in whole or in part. If any provision of this Agreement is found by such an authority to be invalid or unenforceable in whole or in part, such provision will be changed and interpreted so as to best accomplish the objectives of such unenforceable or invalid provision and the intent of the parties, within the limits of applicable law.
- 9.8 **Governing Law.** This Agreement and any disputes arising out of or relating to this Agreement will be governed by, construed and interpreted in accordance with the internal laws of Commonwealth of Massachusetts, without regard to any choice of law principle that would require the application of the law of another jurisdiction. The parties expressly reject any application to this Agreement of (a) the United Nations Convention on Contracts for the International Sale of Goods; and (b) the 1974 Convention on the Limitation Period in the International Sale of Goods, as amended by that certain protocol, done at Vienna on April 11, 1980.
- 9.9 **Jurisdiction; Venue.** Any legal action or proceeding concerning the validity, interpretation and enforcement of this Agreement, matters arising out of or related to this Agreement or its making, performance or breach, or related matters will be brought exclusively in the courts of the Commonwealth of Massachusetts in the County of Middlesex or of the United States of America for the District of Massachusetts. All parties consent to the exclusive jurisdiction of those courts and waive any objection to the propriety or convenience of such venues.
- 9.10 **Dispute Resolution.** If a dispute arises between the parties relating to this Agreement, the parties shall meet in good faith to discuss and resolve the dispute. If the parties cannot resolve the dispute within thirty (30) days, senior management representatives of each party will meet in good faith to resolve the dispute. If the dispute remains unresolved after attempted resolution by senior management representatives of the parties as described above, then each party will be free to pursue any available remedy at law or in equity. Each party will bear its own legal fees and any costs incurred under this Section 9.10. Nothing in this Section 9.10 shall be interpreted to (i) modify either party's termination rights in Section 8; or (ii) prohibit the Chief Executive Officer ("CEO") of either party from reaching out to the CEO of the other party at any time to attempt to resolve the dispute.
- 9.11 **Waivers.** Any delay in enforcing a party's rights under this Agreement, or any waiver as to a particular default or other matter, will not constitute a waiver of such party's rights to the future enforcement of its rights under this Agreement, except with respect to an express written waiver relating to a particular matter for a particular period of time signed by an authorized representative of the waiving party, as applicable.
- 9.12 **Force Majeure.** In the event either party shall be delayed or hindered in or prevented from the performance of any act required hereunder by reasons of strike, lockouts, labor troubles, power failure, restrictive government or judicial orders, or decrees, riots, insurrection, war, Acts of God, inclement weather or other reason or cause beyond that party's control, then performance of such act (except for the payment of money owed) shall be excused for the period of such delay. Service Provider will use reasonable commercial efforts to select Sites in countries with stable economic and political environments.
- 9.13 **No Strict Construction; Headings; Interpretation.** This Agreement has been prepared jointly and will not be strictly construed against either party. The section headings are included solely for convenience of reference and will not control or affect the meaning or interpretation of any of the provisions of this Agreement. The words "include," "includes" and "including" when used in this Agreement are deemed to be followed by the phrase "but not limited to".
- 9.14 **Counterparts.** This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original and all of which together will constitute one and the same instrument. A facsimile or portable document format (".pdf") copy of this Agreement, including the signature pages, will be deemed an original.

IN WITNESS WHEREOF, each party has caused this Master Services Agreement to be executed by its duly authorized representative as of the Effective Date.

AKEBIA THERAPEUTICS, INC.

By: /s/ John P. Butler
Print Name: John P. Butler
Title: President and Chief Executive Officer

QUINTILES, INC.

By: /s/ Charlotte T. Oehman
Print Name: Charlotte T. Oehman
Title: Vice President and Senior Associate General Counsel

*** Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

Appendix A

SAMPLE CHANGE NOTIFICATION

CHANGE NOTIFICATION # [___]

When a change in scope of a project is necessary, Service Provider will generate a Change Notification in accordance with Section 2.2 of the Agreement. The Change Notification will be submitted to the Sponsor Representative. The Sponsor Representative must sign the Change Notification authorizing the work or request that a formal Change Order be processed. Either a Change Notification or formal Change Order authorizing the additional work must be approved in writing by Sponsor prior to Service Provider beginning work and incurring fees on such additional tasks. Service Provider will maintain a current Change Notification log as attached to this Change Notification request form.

Date of Request:

Originally Requested by:

Service Provider Sponsor

Sponsor Study Number:

Sponsor Representative:

Service Provider Project Leader:

Description of the scope of change(s), and any anticipated impact to project timeline. Include start and stop dates for the new work being proposed. Attach documentation if necessary.

Work Order # _____

Sponsor Approval (Check one):

- Sponsor authorizes Service Provider to begin the requested work immediately, up to \$_____, (inclusive of labor fees and expenses). Service Provider will provide a full cost estimate for this request within [****] days of receipt of Change Notification.
- Pursuant to Section 2.2 of the Agreement, Service Provider may not begin work on the above request until Service Provider delivers and Sponsor approves a formal Work Order. Service Provider will provide a full cost estimate for this request to Sponsor when it submits the Work Order to Sponsor for review and approval. Service Provider and Sponsor will negotiate the Work Order and applicable attachments.
- Pursuant to Section 2.3 of the Agreement, Service Provider may not begin work on the above request until Service Provider delivers and Sponsor approves a formal Change Order. Service Provider will provide a full cost estimate for this request to Sponsor when it submits the Change Order to Sponsor for review and approval. Service Provider and Sponsor will negotiate the Change Order and applicable attachments.
- Service Provider is requested to commence with the above-detailed work immediately.
- Sponsor does not want to proceed with the commencement of the tasks set forth above under any conditions.

[*] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.**

AGREED TO AND ACCEPTED BY:

AKEBIA THERAPEUTICS, INC.

By: _____
Print Name: _____
Title: _____
Date: _____

QUINTILES, INC.

By: _____
Print Name: _____
Title: _____
Date: _____

*****] Portions of this exhibit have been redacted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.**

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John P. Butler, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Akebia Therapeutics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of the registrant's Board of Directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 11, 2015

By: /s/ John P. Butler
John P. Butler
President, Chief Executive Officer and Director
(Principal Executive Officer)

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Jason A. Amello, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Akebia Therapeutics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of the registrant's Board of Directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 11, 2015

By: /s/ Jason A. Amello
Jason A. Amello
Senior Vice President, Chief Financial Officer and
Treasurer
(Principal Financial Officer)

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 (18 U.S.C. Section 1350)

In connection with the accompanying Quarterly Report of Akebia Therapeutics, Inc. (the Company) on Form 10-Q for the fiscal quarter ended June 30, 2015 (the Report), I, John P. Butler, as Chief Executive Officer and President of the Company, and I, Jason A. Amello, as Senior Vice President, Chief Financial Officer and Treasurer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: August 11, 2015

By: /s/ John P. Butler
John P. Butler
President, Chief Executive Officer and Director
(Principal Executive Officer)

Date: August 11, 2015

By: /s/ Jason A. Amello
Jason A. Amello
Senior Vice President, Chief Financial Officer and
Treasurer
(Principal Financial Officer)