

Akebia Therapeutics, Inc.
Form 424B5
March 22, 2018
Table of Contents

**Filed Pursuant to Rule 424(b)(5)
Registration No. 333-223585**

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not offers to sell securities and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated March 22, 2018

Preliminary Prospectus Supplement

(To Prospectus dated March 12, 2018)

\$85,000,000

Common Stock

We are offering \$85,000,000 of shares of our common stock pursuant to this prospectus supplement. Our common stock is listed for trading on The Nasdaq Global Market under the symbol AKBA. On March 21, 2018, the closing sales price of our common stock on The Nasdaq Global Market was \$12.00 per share.

We are an emerging growth company as defined by the Jumpstart Our Business Startups Act of 2012 and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus supplement and future filings.

Investing in our common stock involves a high degree of risk. See Risk Factors beginning on page S-5 of this prospectus supplement as well as the accompanying prospectus and the documents we have filed with the Securities and Exchange Commission that are incorporated by reference herein for more information before you make any investment in our common stock.

	<i>Per share</i>	<i>Total</i>
<i>Public offering price</i>	\$	\$
<i>Underwriting discounts and commissions (1)</i>	\$	\$
<i>Proceeds, before expenses, to us</i>	\$	\$

(1) We refer you to Underwriting beginning on page S-15 of this prospectus supplement for more information regarding underwriting compensation.

The underwriter may also purchase up to an additional \$12,750,000 of shares of common stock from us on the same terms and conditions as set forth above within 30 days from the date of this prospectus supplement. If the underwriter exercises the option in full, the total underwriting discounts and commissions will be \$, and the total proceeds, before expenses, to us will be \$.

Neither the Securities and Exchange Commission nor any state securities regulator has approved or disapproved these securities, or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriter is offering the common stock set forth under Underwriting. Delivery of the shares will be made on our about , 2018.

Sole Book-Running Manager

MORGAN STANLEY

The date of this prospectus supplement is , 2018.

Table of Contents

TABLE OF CONTENTS

Prospectus Supplement

<u>Presentation of Information</u>	S-ii
<u>Prospectus Supplement Summary</u>	S-1
<u>The Offering</u>	S-3
<u>Risk Factors</u>	S-5
<u>Use of Proceeds</u>	S-6
<u>Dividend Policy</u>	S-7
<u>Price Range of Our Common Stock</u>	S-8
<u>Capitalization</u>	S-9
<u>Dilution</u>	S-10
<u>Material United States Federal Income Tax Considerations for Non-U.S. Holders</u>	S-11
<u>Underwriting</u>	S-15
<u>Legal Matters</u>	S-22
<u>Experts</u>	S-22
<u>Where You Can Find More Information</u>	S-22
<u>Incorporation of Certain Information by Reference</u>	S-22

Prospectus

<u>About This Prospectus</u>	1
<u>About Akebia Therapeutics, Inc.</u>	2
<u>Risk Factors</u>	3
<u>Cautionary Note Regarding Forward-Looking Statements</u>	3
<u>Use of Proceeds</u>	4
<u>Selling Securityholders</u>	5
<u>Plan of Distribution</u>	6
<u>Description of Capital Stock</u>	7
<u>Description of Warrants</u>	11
<u>Description of Units</u>	12
<u>Where You Can Find More Information</u>	13
<u>Incorporation of Certain Documents by Reference</u>	13
<u>Legal Matters</u>	14
<u>Experts</u>	14

Table of Contents

PRESENTATION OF INFORMATION

These offering materials consist of two documents: (1) this prospectus supplement, which describes the terms of the common stock that we are currently offering, and (2) the accompanying prospectus, which provides general information about us. The information in this prospectus supplement supersedes any inconsistent information included or incorporated by reference in the accompanying prospectus.

Neither we nor the underwriter has authorized anyone to provide you with any additional information or any information that is different from that contained or incorporated by reference in this prospectus supplement, the accompanying prospectus and any free writing prospectus provided in connection with this offering. We and the underwriter take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. Neither we nor the underwriter is making any offer to sell these securities in any jurisdiction where the offer or sale is not permitted. This prospectus supplement, the accompanying prospectus, any free writing prospectus provided in connection with this offering and the documents incorporated by reference herein and therein are accurate only as of their respective dates, regardless of the time of delivery of this prospectus supplement, the accompanying prospectus or any such free writing prospectus. Our business, operating results, financial condition and prospects may have changed since those dates.

It is important for you to read and consider all the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus and any free writing prospectus provided in connection with this offering before making your investment decision.

This prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and therein and any free writing prospectus provided in connection with this offering contain various forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act), which represent our expectations or beliefs concerning future events. These forward-looking statements include, but are not limited to, statements about:

the potential therapeutic applications of the HIF pathway;

the potential of our pipeline and our research activities;

the potential therapeutic benefits, safety profile and effectiveness of our product candidates, including the potential for vadadustat to set a new standard of care in the treatment of anemia due to chronic kidney disease;

the potential indications and market potential and acceptance of our product candidates;

our competitive position, including estimates, developments and projections relating to our competitors and their products and product candidates, and our industry;

our expectations, projections and estimates regarding our costs, revenues, capital requirements, need for additional capital, cash flows, financial performance, profitability, tax obligations, liquidity, growth, contractual obligations, the period of time our cash resources and collaboration funding will fund our current operating plan, internal control over financial reporting, disclosure controls and procedures;

the timing of the availability and presentation of clinical trial data and results;

our and our collaborators' strategy, plans and expectations with respect to the development, manufacturing, commercialization, launch, marketing and sale of our product candidates, and the associated timing thereof;

the designs of our studies, and the type of information and data expected from our studies;

the timing of or likelihood of regulatory filings and approvals, including labeling or other restrictions;

S-ii

Table of Contents

the targeted timing of enrollment of our clinical trials;

the timing of initiation of our clinical trials and plans to conduct preclinical and clinical studies in the future;

the timing and amounts of payments from our collaborators and licensees, and the anticipated arrangements and benefits under our collaboration and license agreements;

our intellectual property position, including obtaining and maintaining patents; and the timing, outcome and impact of administrative, regulatory, legal and other proceedings relating to our patents and other proprietary and intellectual property rights;

the impact of accounting standards and estimates;

our facilities, lease commitments, and future availability of facilities;

our employees, employee compensation, and employee relations; and

the implementation of our business model and strategic plans for our business, product candidates and technology.

These forward-looking statements involve risks and uncertainties, including those that are described in Part I, Item 1A. Risk Factors included in our Annual Report on Form 10-K for the year ended December 31, 2017, filed with the Securities and Exchange Commission on March 12, 2018, and elsewhere in this prospectus supplement, that could cause our actual results, financial condition, performance or achievements to be materially different from those indicated in these forward-looking statements. Given these risks and uncertainties, you should not place undue reliance on these forward-looking statements. Forward-looking statements speak only as of the date that they are made. Except as required by law, we assume no obligation to publicly update or revise these forward-looking statements for any reason.

We own or have rights to trademarks, trade names and copyrights that we use in connection with the operation of our business, including our corporate names, logos and website names. Solely for convenience, some of the trademarks, trade names and copyrights referred to in this prospectus supplement are listed without the customary symbols, but we will assert, to the fullest extent permitted by applicable law, our rights to our trademarks, service marks, trade names and copyrights.

Unless stated otherwise or the context otherwise requires, we use the terms Akebia, the Company, we, us and our this prospectus supplement to refer to Akebia Therapeutics, Inc. and its subsidiaries. When we refer to you we mean the investors and potential investors in the common stock offered hereby.

Table of Contents

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information included or incorporated by reference in this prospectus supplement and the accompanying prospectus and does not contain all of the information that may be important to you. You should carefully review this entire prospectus supplement and the accompanying prospectus, including the risk factors and financial statements included and incorporated by reference in this prospectus supplement and the accompanying prospectus, before making your investment decision.

OUR BUSINESS

We are a biopharmaceutical company focused on developing and commercializing novel therapeutics for patients based on hypoxia-inducible factor, or HIF, biology, and building our pipeline while leveraging our development and commercial expertise in renal disease. HIF is the primary regulator of the production of red blood cells, or RBCs, in the body, as well as other important metabolic functions. Pharmacologic modulation of the HIF pathway may have broad therapeutic applications. Our lead product candidate, vadadustat, is an oral therapy in Phase 3 development and has the potential to set a new standard of care in the treatment of anemia due to chronic kidney disease, or CKD. Our management team has extensive experience in developing and commercializing drugs for the treatment of renal and metabolic disorders, as well as a deep understanding of HIF biology. This unique combination of HIF and renal expertise is enabling us to advance a pipeline of HIF-based therapies to potentially address serious diseases.

HIF, a pathway involving hundreds of genes, is the same pathway used by the body to adapt to lower oxygen availability, or hypoxia, such as that experienced with a moderate increase in altitude. At higher altitudes, the body responds to lower oxygen levels by increasing the availability of HIF, which coordinates the interdependent processes of iron utilization and erythropoietin, or EPO, production to increase RBC production and, ultimately, improve oxygen delivery. The significance of the HIF pathway was recognized by the 2016 Albert Lasker Basic Medical Research Award, which honored the three physician-scientists who discovered the HIF pathway and elucidated this primary oxygen sensing mechanism that is essential for survival. HIF protein is constantly being produced under normal oxygen conditions, but is quickly degraded by prolyl hydroxylases, or PH. Under hypoxic conditions, HIF-PHs are inhibited, allowing HIF to stimulate erythropoiesis. These findings have opened up new possibilities for developing therapeutics, such as HIF-PH inhibitors, which have the potential to treat many diseases.

Our lead product candidate, vadadustat, is a HIF-PH inhibitor, or HIF-PHI, in Phase 3 development for the treatment of anemia due to CKD. Anemia is common in patients with CKD, and its prevalence increases as CKD progresses. Anemia is a condition characterized by abnormally low levels of hemoglobin. Hemoglobin is contained within RBCs and carries oxygen to other parts of the body. If there are too few RBCs or if hemoglobin levels are low, the cells in the body will not get enough oxygen. In patients with CKD, anemia results from inadequate EPO levels, which negatively affect RBC production. In addition, iron, which is essential to RBC production, may be deficient in patients with CKD. Left untreated, anemia significantly accelerates overall deterioration of patient health with increased morbidity and mortality.

Based on third party prevalence data and company estimates, approximately 37 million people in the United States have CKD and approximately 5.7 million of these individuals suffer from anemia. Anemia from CKD is currently treated by injectable recombinant human erythropoiesis-stimulating agents, or injectable ESAs, such as EPOGEN[®] (epoetin alfa) and Aranesp[®] (darbepoetin alfa), or with iron supplementation or RBC transfusion. Based on publicly available information on ESA sales and market data compiled by a third-party vendor, global sales of injectable ESAs for all uses were estimated to be approximately \$7.0 billion in 2016. The vast majority of these sales were for the treatment of anemia due to CKD.

S-1

Table of Contents

When administered to a patient, injectable ESAs provide supra-physiological levels of exogenous erythropoietin to stimulate production of RBCs. While injectable ESAs can be effective in raising hemoglobin levels, they have the potential to cause significant side effects, and need to be injected subcutaneously or intravenously. In particular, injectable ESAs may lead to thrombosis, stroke, myocardial infarction and death. These safety concerns, which became evident starting in 2006, have led to a significant reduction in the use of injectable ESAs. Today, anemia is either not treated or inadequately treated in the majority of non-dialysis dependent, or NDD, CKD patients. There is an unmet need for treatment options that offer an improved safety profile and such agents would have significant market potential. Vadadustat is designed to stimulate erythropoiesis and effectively treat renal anemia while avoiding the supra-physiologic EPO levels previously observed with injectable ESAs. In addition, vadadustat, if approved, would provide patients with an oral treatment option, rather than an injection. For these reasons, we believe that vadadustat has the potential to set a new standard of care for the treatment of anemia due to CKD.

Phase 1 and Phase 2 data led us to the design of our Phase 3 clinical program for vadadustat. The vadadustat Phase 3 program in NDD-CKD patients with anemia, called PRO₂TECT, and in dialysis dependent, or DD, CKD patients with anemia, called INNO₂VATE, is designed to enroll up to approximately 6,900 patients evaluating once daily oral dosing of vadadustat against an injectable ESA active comparator, darbepoetin alfa. The enrollment numbers and the completion of PRO₂TECT and INNO₂VATE will be driven by the accrual of major adverse cardiovascular events, or MACE. In December 2015, the first patient was dosed in PRO₂TECT, and the first patient was dosed in INNO₂VATE in August 2016. As of December 31, 2017, we expect the remaining external aggregate contract research organization, or CRO, costs of PRO₂TECT and INNO₂VATE to be in the range of \$420.0 million to \$450.0 million. We anticipate reporting top-line clinical data for the PRO₂TECT and INNO₂VATE studies in 2019, subject to the accrual of MACE events. Subject to marketing approvals, we plan to launch vadadustat for the treatment of anemia due to CKD in 2020.

We revised the study designs of FO₂RWARD and TRILO₂GY, which we believe will provide additional characterization and differentiation of vadadustat and further strengthen our commercial position if our product candidate is approved. The revised FO₂RWARD study will include once-daily and three-times weekly dosing, data to inform ESA-switching protocols, a larger sample size, and a broader dialysis population that is inclusive of hyporesponders, or patients with anemia due to CKD who are on dialysis and do not adequately respond to injectable ESA. Hyporesponders represent approximately 10-15% of subjects with anemia due to DD-CKD, yet they account for 30-40% of total injectable ESA use. These patients have demonstrated a persistently higher risk of mortality than non-hyporesponders, and represent a high unmet need. Given its differentiated mechanism of action, we believe that vadadustat may provide a treatment option for these patients. The revised TRILO₂GY study will include once-daily and three-times weekly dosing and an ESA control, a larger sample size, and a design that can generate data to inform switching from Epogen[®], Aranesp[®] and Mircera[®].

If vadadustat is approved by the United States Food and Drug Administration, or FDA, we plan to establish our own commercial organization in the United States while leveraging our collaboration with Otsuka Pharmaceutical Co. Ltd., or Otsuka, and its well-established commercial organization in the United States. We also granted Otsuka exclusive rights to commercialize vadadustat in Europe, China and certain other markets, subject to marketing approvals. In Japan and certain other countries in Asia, we granted Mitsubishi Tanabe Pharma Corporation, or MTPC exclusive rights to commercialize vadadustat, subject to marketing approvals. In May 2017, we entered into an exclusive license agreement with Vifor (International) Ltd., or Vifor Pharma, to sell vadadustat solely to Fresenius Kidney Care Group LLC, or FKC, dialysis clinics in the United States subject to approval by the FDA and inclusion of vadadustat in a bundled reimbursement model. During the term of the license agreement, Vifor Pharma may not sell to FKC or its affiliates any HIF product that competes with vadadustat in the United States.

Table of Contents

In addition to vidadustat, we are developing a HIF-based portfolio of product candidates that target serious diseases of high unmet need. Our portfolio includes product candidates developed internally as well as in-licensed product candidates, such as AKB-5169. In February 2017, we signed an exclusive agreement with Janssen Pharmaceutica NV, or Janssen, a subsidiary of Johnson & Johnson, for access to an extensive library of well-characterized HIF pathway compounds with potential applications across multiple therapeutic areas. The lead compound, AKB-5169, is a differentiated preclinical compound in development as an oral treatment for inflammatory bowel disease, or IBD. We intend to complete further preclinical development of this compound, and we are targeting submitting an Investigational New Drug application, or IND, to the FDA in 2018.

OUR PRINCIPAL EXECUTIVE OFFICES

Our principal executive offices are located at 245 First Street, Suite 1100, Cambridge, Massachusetts 02142. Our telephone number is (617) 871-2098. Our website address is www.akebia.com. The information found on our website, or that may be accessed by links on our website, is not part of this prospectus supplement or the accompanying prospectus.

EMERGING GROWTH COMPANY

We are an emerging growth company, as defined in the Jumpstart Our Business Startup Act of 2012. We will remain an emerging growth company until the earlier of (1) December 31, 2019 (the last day of the fiscal year following the fifth anniversary of our initial public offering), (2) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.07 billion, (3) the last day of the fiscal year in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th, and (4) the date on which we have issued more than \$1.07 billion in non-convertible debt during the prior three-year period. We refer to the Jumpstart Our Business Startup Act of 2012 herein as the JOBS Act, and references herein to emerging growth company shall have the meaning associated with it in the JOBS Act.

THE OFFERING

The summary below describes the offering of our common stock. Certain of the terms and conditions described below are subject to important limitations and exceptions. The Description of Common Stock section of the accompanying prospectus contains a more detailed description of the terms and conditions of the common stock.

Common stock offered by Akebia	\$85,000,000 of shares.
Common stock to be outstanding after this offering	54,779,567 shares, which is based an aggregate offering of \$85,000,000 of our common stock at an assumed public offering price of \$11.86 per share, the last reported sale price of our common stock on The Nasdaq Global Market on March 20, 2018 (or 55,854,609 shares if the underwriter exercises its option to purchase additional shares).
Nasdaq Global Market symbol	AKBA

S-3

Table of Contents

Use of proceeds

We intend to use the net proceeds from this offering for the continued clinical development and optimization of the vadadustat program, including pre-commercial planning activities, and the remainder for working capital, business development and other general corporate purposes. See Use of Proceeds.

Risk factors

See Risk Factors beginning on page S-5 of this prospectus supplement, as well as the accompanying prospectus and the documents we have filed with the Securities and Exchange Commission (the SEC) that are incorporated by reference herein and therein.

The number of shares of common stock to be outstanding after this offering is based on 47,612,619 shares outstanding as of December 31, 2017 and excludes:

3,660,014 shares of common stock issuable upon exercise of stock options outstanding as of December 31, 2017 at a weighted-average exercise price of \$9.47 per share and 728,738 shares of common stock issuable upon vesting of restricted stock units as of December 31, 2017;

1,790,600 shares of common stock reserved for future issuance under our 2014 Incentive Plan, 652,290 shares of common stock reserved for future issuance under our 2014 Employee Stock Purchase Plan and 750,000 shares of common stock reserved for issuance in 2018 under our Inducement Award Program; and

509,611 shares of common stock reserved for future issuance pursuant to outstanding warrants at an exercise price of \$9.81 per share.

Except as otherwise indicated, all information contained in this prospectus:

assumes that the underwriter does not exercise its option to purchase additional shares; and

assumes no exercise of outstanding options or warrants or vesting of restricted stock units after December 31, 2017.

Table of Contents

RISK FACTORS

An investment in our common stock involves risks. You should carefully consider the risks described below, as well as the other information included or incorporated by reference in this prospectus supplement and the accompanying prospectus, including Part I, Item IA Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2017, filed with the SEC on March 12, 2018, before making an investment decision. In addition, please read Presentation of Information in this prospectus supplement and Cautionary Note Regarding Forward-Looking Statements in the accompanying prospectus, where we describe additional uncertainties associated with our business and the forward-looking statements included or incorporated by reference in this prospectus supplement and the accompanying prospectus. Please note that additional risks not currently known to us or that we currently deem immaterial may also impair our business and operations.

Risks Related to this Offering

You will incur immediate and substantial dilution as a result of this offering.

The public offering price of our common stock will be substantially higher than the net tangible book value per share of our common stock. Therefore, if you purchase common stock in this offering, you will pay a price per share that substantially exceeds our as adjusted net tangible book value per share after this offering. To the extent shares subsequently are issued upon the exercise of options or warrants or the vesting of restricted stock units, you will incur further dilution. Based on an assumed public offering price of \$11.86 per share, the last reported sale price of our common stock on The Nasdaq Global Market on March 20, 2018, you will incur immediate and substantial dilution of \$8.13 per share, representing the difference between our as adjusted net tangible book value per share, after giving effect to this offering, and the public offering price. See the section of this prospectus supplement entitled Dilution for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

We have broad discretion in the use of net proceeds from this offering and may not use them effectively.

We currently intend to use the net proceeds from this offering for the continued clinical development and optimization of the vadadustat program, including pre-commercial planning activities, and the remainder for working capital, business development and other general corporate purposes. See the section of this prospectus supplement entitled Use of Proceeds for further detail. Although we currently intend to use the net proceeds from this offering in such a manner, we will have broad discretion in the application of the net proceeds. Our failure to apply these funds effectively could affect our ability to continue to develop and commercialize our product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or loses value.

Table of Contents

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately \$84.8 million (or approximately \$97.5 million if the underwriter exercises its option to purchase additional shares in full), after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering for the continued clinical development and optimization of the vadadustat program, including pre-commercial planning activities, and the remainder for working capital, business development and other general corporate purposes.

Our expected use of net proceeds from this offering represents our intentions based on our present plans and business conditions, which could change as our plans and business conditions evolve. The amount and timing of our actual expenditures will depend on numerous factors, including the results of our research and development efforts, the timing and success of preclinical studies, our ongoing clinical studies or clinical studies we may commence in the future, the timing of regulatory submissions and the feedback from regulatory authorities. As a result, our management will have broad discretion over the use of the net proceeds from this offering. Pending our use of the net proceeds from this offering, we may temporarily invest the net proceeds in investment-grade, interest-bearing securities.

We anticipate that the net proceeds from this offering, together with our existing cash and cash equivalents, available for sale securities and the funds expected to be received in connection with our collaborations, will be sufficient to enable us to fund our operating expenses and capital expenditure requirements into the first quarter of 2020. We have based these estimates on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect.

Table of Contents

DIVIDEND POLICY

We have not paid cash dividends on our common stock during our two most recent fiscal years. We do not intend to pay any dividends on our common stock for the foreseeable future.

S-7

Table of Contents**PRICE RANGE OF OUR COMMON STOCK**

Our common stock has been publicly traded on The Nasdaq Global Market under the symbol AKBA since our initial public offering on March 19, 2014. The following table summarizes the high and low sale prices for our common stock for the fiscal periods indicated as reported on The Nasdaq Global Market.

	High	Low
2016		
First Quarter	\$ 12.74	\$ 7.02
Second Quarter	\$ 9.99	\$ 7.00
Third Quarter	\$ 9.38	\$ 7.31
Fourth Quarter	\$ 11.07	\$ 7.16
2017		
First Quarter	\$ 10.70	\$ 8.58
Second Quarter	\$ 16.54	\$ 8.69
Third Quarter	\$ 19.73	\$ 12.78
Fourth Quarter	\$ 20.25	\$ 14.07
2018		
First Quarter (through March 20, 2018)	\$ 15.86	\$ 11.71

On March 20, 2018, the last reported sale price for our common stock on The Nasdaq Global Market was \$11.86 per share. As of March 1, 2018, we had 22 stockholders of record.

Table of Contents**CAPITALIZATION**

The following table sets forth our cash and cash equivalents, available for sale securities and capitalization as of December 31, 2017:

on an actual basis; and

on an as adjusted basis to reflect the sale of shares of common stock in this offering and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us and based on an assumed public offering price of \$11.86 per share, the last reported sale price of our common stock on The Nasdaq Global Market on March 20, 2018.

You should read the following table along with our financial statements and the accompanying notes to those statements.

	As of December 31, 2017	
	Actual	As Adjusted
Cash and cash equivalents and available for sale securities	\$ 317,791,800	\$ 402,567,800
Stockholders' equity (deficit):		
Preferred stock, \$0.00001 par value; 25,000,000 shares authorized, none issued and outstanding		
Common stock, \$0.00001 par value; 175,000,000 shares authorized, 47,612,619 shares issued and outstanding actual; and 54,779,567 shares issued and outstanding, as adjusted	474	546
Additional paid-in capital	493,822,522	578,598,451
Accumulated other comprehensive income (loss)	(441,601)	(441,601)
Accumulated deficit	(374,049,953)	(374,049,953)
Total stockholders' equity	119,331,443	204,107,443
Total capitalization	\$ 119,331,443	\$ 204,107,443

The number of shares of common stock to be outstanding after this offering is based on 47,612,619 shares outstanding as of December 31, 2017 and excludes:

3,660,014 shares of common stock issuable upon exercise of stock options outstanding as of December 31, 2017 at a weighted-average exercise price of \$9.47 per share and 728,738 shares of common stock issuable upon vesting of restricted stock units as of December 31, 2017;

Edgar Filing: Akebia Therapeutics, Inc. - Form 424B5

1,790,600 shares of common stock reserved for future issuance under our 2014 Incentive Plan, 652,290 shares of common stock reserved for future issuance under our 2014 Employee Stock Purchase Plan and 750,000 shares of common stock reserved for issuance in 2018 under our Inducement Award Program; and

509,611 shares of common stock reserved for future issuance pursuant to outstanding warrants at an exercise price of \$9.81 per share.

S-9

Table of Contents**DILUTION**

If you invest in our common stock, your interest will be diluted to the extent of the difference between the price per share you pay in this offering and the net tangible book value per share of our common stock immediately after this offering. Our net tangible book value of our common stock as of December 31, 2017 was approximately \$119.3 million, or approximately \$2.51 per share of common stock based on 47,612,619 shares outstanding as of December 31, 2017. Net tangible book value per share is equal to our total tangible assets, less our total liabilities, divided by the total number of shares outstanding as of December 31, 2017.

After giving effect to the sale by us of \$85,000,000 of common stock at an assumed offering price of \$11.86 per share, the last reported sale price of our common stock on The Nasdaq Global Market on March 20, 2018, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of December 31, 2017 would have been approximately \$204.1 million, or \$3.73 per share. This would represent an immediate increase in net tangible book value of \$1.22 per share to our existing stockholders and an immediate dilution in net tangible book value of \$8.13 per share to new investors purchasing our common stock in this offering at the assumed public offering price. The following table illustrates this calculation on a per share basis:

Assumed offering price per share	\$ 11.86
Net tangible book value per share as of December 31, 2017	2.51
Increase in net tangible book value per share attributable to the offering	1.22
As adjusted net tangible book value per share after giving effect to the offering	3.73
Dilution in net tangible book value per share to new investors in the offering	\$ 8.13

The information discussed above is illustrative only and will adjust based on the actual public offering price and other terms of this offering determined at pricing.

The foregoing table and discussion is based on 47,612,619 shares outstanding as of December 31, 2017 and excludes:

3,660,014 shares of common stock issuable upon exercise of stock options outstanding as of December 31, 2017 at a weighted-average exercise price of \$9.47 per share and 728,738 shares of common stock issuable upon vesting of restricted stock units as of December 31, 2017;

1,790,600 shares of common stock reserved for future issuance under our 2014 Incentive Plan, 652,290 shares of common stock reserved for future issuance under our 2014 Employee Stock Purchase Plan and 750,000 shares of common stock reserved for issuance in 2018 under our Inducement Award Program; and

509,611 shares of common stock reserved for future issuance pursuant to outstanding warrants at an exercise price of \$9.81 per share.

The exercise of outstanding options to purchase shares of our common stock having an exercise price less than the public offering price would increase the dilutive effect to new investors.

This discussion of dilution, and the table quantifying it, assumes no issuance of up to \$12.8 million in shares of common stock that we may sell to the underwriter upon exercise of its option to purchase additional shares. If the underwriter exercises in full its option to purchase additional shares at the assumed public offering price of \$11.86 per share, the last reported sale price of our common stock on The Nasdaq Global Market on March 20, 2018, the as adjusted net tangible book value after this offering would be approximately \$3.88 per share, representing an increase in net tangible book value of approximately \$1.38 per share to existing stockholders and immediate dilution in net tangible book value of approximately \$7.98 per share to investors purchasing our common stock in this offering at the public offering price.

S-10

Table of Contents

MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

FOR NON-U.S. HOLDERS

The following is a summary of the material U.S. federal income and estate tax considerations relating to the purchase, ownership and disposition of shares of our common stock acquired pursuant to this offering by Non-U.S. Holders (defined below). This summary does not purport to be a complete analysis of all the potential tax considerations relevant to Non-U.S. Holders with respect to shares of our common stock. This summary is based upon the U.S. Internal Revenue Code of 1986, as amended (the Code), the Treasury regulations promulgated or proposed thereunder and administrative and judicial interpretations thereof, all as of the date hereof and all of which are subject to change or differing interpretations at any time, possibly with retroactive effect.

This summary assumes that shares of our common stock are held by a Non-U.S. Holder as capital assets within the meaning of Section 1221 of the Code (generally, property held for investment). This summary does not purport to deal with all aspects of U.S. federal income and estate taxation that might be relevant to particular Non-U.S. Holders in light of their particular investment circumstances or status, nor does it address specific tax considerations that may be relevant to particular persons who are subject to special treatment under U.S. federal income tax laws (including, for example, financial institutions, broker-dealers, insurance companies, partnerships or other pass-through entities or arrangements, certain U.S. expatriates or former long-term residents of the United States, tax-exempt organizations, pension plans, controlled foreign corporations and passive foreign investment companies (each as defined in the Code), corporations that accumulate earnings to avoid U.S. federal income tax, persons in special situations, such as those who have elected to mark securities to market or those who hold shares of our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment, or holders subject to the alternative minimum tax or the 3.8% tax on net investment income). In addition, except as explicitly addressed herein with respect to estate tax, this summary does not address estate and gift tax considerations or considerations arising under the tax laws of any state, local or non-U.S. jurisdiction.

For purposes of this summary, a Non-U.S. Holder means a beneficial owner of shares of our common stock that, for U.S. federal income tax purposes, is an individual, corporation, estate or trust other than:

an individual who is a citizen or resident of the United States;

a corporation, or any other organization taxable as a corporation for U.S. federal income tax purposes, that is created or organized in or under the laws of the United States, any state thereof or the District of Columbia;

an estate, the income of which is included in gross income for U.S. federal income tax purposes regardless of its source; or

a trust if (1) a U.S. court is able to exercise primary supervision over the trust's administration and one or more United States persons (as defined in the Code) have the authority to control all of the trust's substantial decisions or (2) the trust has a valid election in effect under applicable Treasury regulations to be treated as a United States person.

A modified definition of Non-U.S. Holder applies for U.S. federal estate tax purposes (as discussed below).

If an entity that is classified as a partnership for U.S. federal income tax purposes holds shares of our common stock, the tax treatment of persons treated as its partners for U.S. federal income tax purposes will generally depend upon the status of the partner and the activities of the partnership. Partnerships and other entities that are classified as partnerships for U.S. federal income tax purposes that hold shares of our common stock and their investors are urged to consult their tax advisors.

There can be no assurance that the IRS will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain, a ruling from the IRS or an opinion of counsel with

S-11

Table of Contents

respect to the U.S. federal income or estate tax consequences to a Non-U.S. Holder of the purchase, ownership or disposition of shares of our common stock.

THIS SUMMARY IS FOR GENERAL INFORMATION ONLY AND IS NOT INTENDED TO BE TAX ADVICE. PROSPECTIVE INVESTORS ARE URGED TO CONSULT THEIR TAX ADVISORS CONCERNING THE U.S. FEDERAL INCOME AND ESTATE TAX CONSEQUENCES TO THEM OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF SHARES OF OUR COMMON STOCK, AS WELL AS THE APPLICATION OF STATE, LOCAL AND NON-U.S. INCOME TAX AND OTHER TAX LAWS.

Distributions on Shares of Our Common Stock

As discussed under **Dividend Policy** above, we do not currently pay, and do not anticipate paying in the foreseeable future, cash dividends on shares of our common stock. In the event that we do make a distribution of cash or property with respect to shares of our common stock, any such distributions generally will constitute dividends for U.S. federal income tax purposes to the extent of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles, and will be subject to withholding as described in the next paragraph below. If a distribution exceeds our current or accumulated earnings and profits, the excess will be treated as a tax-free return of the Non-U.S. Holder's investment, up to such holder's adjusted tax basis in its shares of our common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below in **Gain on Sale, Exchange or Other Taxable Disposition of shares of Our Common Stock**. Any distribution described in this paragraph would also be subject to the discussion below in **Additional Withholding and Information Reporting Requirements for Shares of Our Common Stock Held by or through Non-U.S. Entities**.

Any dividends paid to a Non-U.S. Holder with respect to shares of our common stock generally will be subject to a 30% U.S. federal withholding tax unless such Non-U.S. Holder provides the applicable withholding agent with an appropriate and validly completed IRS Form W-8 (including applicable attachments) establishing a reduction or exemption from such withholding tax (which form may be required to be updated periodically), prior to the payment of dividends, such as:

IRS Form W-8BEN or W-8BEN-E, as appropriate (or successor form), certifying, under penalties of perjury, that such Non-U.S. Holder is entitled to a reduction in withholding under an applicable income tax treaty; or

IRS Form W-8ECI (or successor form) certifying, under penalties of perjury, that a dividend paid on shares of our common stock is not subject to withholding tax because it is effectively connected with the conduct of a trade or business in the United States of the Non-U.S. Holder (in which case such dividend generally will be subject to regular graduated U.S. federal income tax rates on a net income basis as described below).

The certification requirement described above also may require a Non-U.S. Holder that provides an IRS form or that claims treaty benefits to provide its U.S. taxpayer identification number. Special certification and other requirements apply in the case of certain Non-U.S. Holders that are intermediaries or pass-through entities for U.S. federal income tax purposes.

Each Non-U.S. Holder is urged to consult its tax advisor about the specific methods for satisfying these requirements. A claim for exemption will not be valid if the person receiving the applicable form has actual knowledge or reason to know that the statements on the form are false.

If dividends are effectively connected with the conduct of a trade or business in the United States of the Non-U.S. Holder (and, if required by an applicable income tax treaty, are attributable to a permanent establishment or fixed base maintained by such Non-U.S. Holder in the United States), the Non-U.S. Holder, although exempt from the withholding tax described above (provided that the certifications described above are

Table of Contents

satisfied), will generally be subject to U.S. federal income tax on such dividends on a net income basis in the same manner as if it were a resident of the United States. In addition, if a dividend is received by a Non-U.S. Holder taxable as a corporation for U.S. federal income tax purposes, such Non-U.S. Holder may be subject to an additional branch profits tax at a 30% rate, unless an applicable income tax treaty provides otherwise.

If a Non-U.S. Holder is eligible for a reduced rate of U.S. federal withholding tax pursuant to an applicable income tax treaty, such holder may obtain a refund or credit of any excess amount withheld by timely filing an appropriate claim for refund with the IRS.

Gain on Sale, Exchange or Other Taxable Disposition of Shares of Our Common Stock

Subject to the discussion below under Additional Withholding and Information Reporting Requirements for Shares of Our Common Stock Held by or through Non-U.S. Entities, in general, a Non-U.S. Holder will not be subject to U.S. federal income tax or withholding tax on any gain realized upon such holder's sale, exchange or other taxable disposition of shares of our common stock unless (i) such Non-U.S. Holder is an individual who is present in the United States for 183 days or more in the taxable year of disposition, and certain other conditions are met, (ii) we are or have been a United States real property holding corporation, as defined in the Code (a USRPHC), at any time within the shorter of the five-year period preceding the disposition and the Non-U.S. Holder's holding period with respect to the applicable shares of our common stock (the relevant period), or (iii) such gain is effectively connected with the conduct by such Non-U.S. Holder of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment or fixed base maintained by such Non-U.S. Holder in the United States).

If the first exception applies, the Non-U.S. Holder generally will be subject to U.S. federal income tax at a rate of 30% (unless an applicable income tax treaty provides otherwise) on the amount by which such Non-U.S. Holder's capital gains allocable to U.S. sources exceed capital losses allocable to U.S. sources during the taxable year of the disposition.

With respect to the second exception above, although there can be no assurance, we believe we are not, and we do not currently anticipate becoming, a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property relative to the fair market value of other business assets, there can be no assurance that we are not currently or will not become a USRPHC in the future. Generally, a corporation is a USRPHC only if the fair market value of its United States real property interests (as defined in the Code) equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus certain other assets used or held for use in a trade or business. Even if we are or become a USRPHC, a Non-U.S. Holder would not be subject to U.S. federal income tax on a sale, exchange or other taxable disposition of shares of our common stock by reason of our status as a USRPHC so long as (i) our common stock is regularly traded on an established securities market (within the meaning of Code Section 897(c)(3)) during the calendar year in which such sale, exchange or other taxable disposition of shares of our common stock occurs and (ii) such Non-U.S. Holder does not own and is not deemed to own (directly, indirectly or constructively) more than 5% of our common stock at any time during the relevant period. If we are a USRPHC and the requirements of (i) or (ii) are not met, gain on the disposition of shares of our common stock generally will be taxed in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply to gain from the disposition of stock in a USRPHC. Prospective investors are urged to consult their tax advisors regarding the possible consequences to them if we are, or were to become, a USRPHC.

If the third exception applies, the Non-U.S. Holder generally will be subject to U.S. federal income tax on a net income basis with respect to such gain in the same manner as if such holder were a resident of the United States,

unless otherwise provided in an applicable income tax treaty, and a Non-U.S. Holder that is a corporation for U.S. federal income tax purposes may also be subject to a branch profits tax on its effectively connected earnings and profits at a rate of 30%, unless an applicable income tax treaty provides otherwise.

S-13

Table of Contents

Additional Withholding and Information Reporting requirements for Shares of Our Common Stock Held by or through Non-U.S. Entities

Sections 1471 through 1474 of the Code and related Treasury regulations and guidance (commonly referred to as FATCA) generally will impose a U.S. federal withholding tax of 30% on certain payments to certain non-U.S. entities (including certain intermediaries), including dividends on and the gross proceeds from a sale, exchange, or other disposition of shares of our common stock, unless such persons comply with a complicated U.S. information reporting, disclosure and certification regime. This regime requires, among other things, a broad class of persons to enter into agreements with the IRS to obtain, disclose and report information about their investors and account holders. An intergovernmental agreement between the United States and an applicable foreign country may, however, modify these requirements and these requirements are different from and in addition to the certification requirements described elsewhere in this discussion. The FATCA withholding rules currently apply to dividend payments on our common stock and are scheduled to apply to payments of gross proceeds from the sale or other disposition of shares of our common stock occurring after December 31, 2018. Prospective investors should consult their tax advisors regarding the possible impact of these rules on their investment in our common stock, and the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of this 30% withholding tax under FATCA.

Backup Withholding and Information Reporting

Payors generally must report annually to the IRS and to each Non-U.S. Holder the gross amount of the distributions on shares of our common stock paid to such holder and the tax withheld, if any, with respect to such distributions. These information reporting requirements apply even if withholding was not required. A Non-U.S. Holder may have to comply with specific certification procedures to establish that the holder is not a United States person (as defined in the Code) or otherwise establish an exemption in order to avoid backup withholding at the then applicable rate with respect to dividends on our common stock. Dividends paid to Non-U.S. Holders subject to the U.S. federal withholding tax, as described above in Distributions on Shares of Our Common Stock, generally will be exempt from U.S. backup withholding.

Information reporting and backup withholding will generally apply to the payment of the proceeds of a disposition of shares of our common stock by a Non-U.S. Holder effected by or through the U.S. office of any broker, U.S. or non-U.S., unless the holder certifies that it is not a United States person (as defined in the Code) and satisfies certain other requirements, or otherwise establishes an exemption. For information reporting purposes, dispositions effected through a non-U.S. office of a broker with certain substantial U.S. ownership, operations or connections generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker, and dispositions otherwise effected through a non-U.S. office generally will not be subject to information reporting. Generally, backup withholding will not apply to a payment of disposition proceeds to a Non-U.S. Holder where the transaction is effected through a non-U.S. office of a U.S. broker or non-U.S. office of a non-U.S. broker. Prospective investors are urged to consult their tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the Non-U.S. Holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment made to a Non-U.S. Holder can be refunded or credited against such Non-U.S. Holder's U.S. federal income tax liability, if any, provided that an appropriate claim is timely filed with the IRS.

Federal Estate Tax

Shares of our common stock held (or treated as held) by an individual who is not a United States citizen or resident (as specifically determined for U.S. federal estate tax purposes) at the time of such individual's death will be included in such individual's gross estate for U.S. federal estate tax purposes, unless an applicable estate tax treaty provides otherwise and, therefore, may be subject to U.S. federal estate tax.

S-14

Table of Contents**UNDERWRITING**

Under the terms and subject to the conditions in an underwriting agreement dated the date of this prospectus supplement, the underwriter has agreed to purchase, and we have agreed to sell to the underwriter, the number of shares indicated below:

Name	Number of Shares
Morgan Stanley & Co. LLC	

The underwriter is offering the shares of common stock subject to its acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the underwriter to pay for and accept delivery of the shares of common stock offered by this prospectus supplement are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriter is obligated to take and pay for all of the shares of common stock offered by this prospectus supplement if any such shares are taken. However, the underwriter is not required to take or pay for the shares covered by the underwriter's option to purchase additional shares described below.

The underwriter initially proposes to offer part of the shares of common stock directly to the public at the offering price listed on the cover page of this prospectus supplement and part to certain dealers. After the initial offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by the underwriter.

We have granted to the underwriter an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to \$12,750,000 of additional shares of common stock at the public offering price listed on the cover page of this prospectus supplement, less underwriting discounts and commissions.

The following table shows the per share and total public offering price, underwriting discounts and commissions and proceeds, before expenses, to us. These amounts are shown assuming both no exercise and full exercise of the underwriter's option to purchase up to an additional \$12,750,000 of shares of common stock.

	Per Share	No Exercise	Total Full Exercise
Public offering price	\$	\$	\$
Underwriting discounts and commissions to be paid by us	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

The estimated offering expenses payable by us, exclusive of the underwriting discounts and commissions, are approximately \$224,000. We have also agreed to reimburse the underwriter for certain of its expenses in an amount of up to \$20,000.

Our common stock is listed on The Nasdaq Global Market under the symbol AKBA.

We, our directors and officers and certain holders of our outstanding stock have agreed that, without the prior written consent of the underwriter, we and they will not, during the period ending 90 days after the date of this prospectus

supplement for us and 60 days for our directors and officers and certain holders of our outstanding stock (the restricted period):

offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock;

S-15

Table of Contents

file any registration statement with the SEC relating to the offering of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock; or

enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock,

whether any such transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise. In addition, we and each such person agrees that, without the prior written consent of the underwriter, we or such other person will not, during the restricted period, make any demand for, or exercise any right with respect to, the registration of any shares of common stock or any security convertible into or exercisable or exchangeable for common stock.

The restrictions described in the immediately preceding paragraph to do not apply to:

the sale of shares to the underwriter;

the issuance by us of shares of common stock upon the exercise of an option or a warrant or the conversion of a security outstanding on the date of this prospectus supplement of which the underwriter has been advised in writing;

the establishment of a written trading plan that satisfies the requirements of Rule 10b5-1 under the Exchange Act, for the transfer of shares of common stock, provided that (i) such plan does not provide for the transfer of common stock during the restricted period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required or voluntarily made regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of common stock may be made under such plan during the restricted period;

transactions relating to shares of our common stock or other securities acquired in open market transactions after the date of the final prospectus supplement;

transfers or dispositions of shares of our common stock, or any security convertible into, exercisable or exchangeable for our common stock, as a bona fide gift;

transfers or dispositions of shares of our common stock, or any security convertible into, exercisable or exchangeable for our common stock, by will or other testamentary document or intestacy;

the exercise of options to purchase shares of our common stock granted under any existing stock incentive plan or stock purchase plan described in our Annual Report on Form 10-K for the year ended December 31, 2017, incorporated herein by reference, and any related transfer of our common stock to us (i) deemed to occur upon the cashless exercise of such options or (ii) for the purpose of paying the exercise price of such

options or for paying taxes (including estimated taxes) due as a result of the exercise of such options provided that any shares of our common stock issued pursuant to such exercise shall be subject to the same restrictions;

transfers to us for the purpose of satisfying tax withholding obligations upon the vesting of other equity incentive awards granted under any existing stock incentive plan or stock purchase plan described in our Annual Report on Form 10-K for the year ended December 31, 2017, incorporated herein by reference;

transfers or distributions not involving a disposition for value of shares of our common stock, or any security convertible into, exercisable or exchangeable for our common stock, to any limited or general partners, stockholders or members of a lock-up signatory, or to a trust, partnership or other entity holding such shares of common stock or any security convertible into, exercisable or exchangeable for our common stock on behalf or for the benefit of such limited or general partners, stockholders or members of the lock-up signatory, or if the lock-up signatory is a corporation, to a wholly-owned subsidiary of such lock-up signatory;

transfers of shares of our common stock, or any security convertible into, exercisable or exchangeable for our common stock, made by one of the lock-up signatories to (i) any trust, corporation, partnership,

Table of Contents

limited liability company or other legal entity who, directly or indirectly, controls, is controlled by, or is under common control with such lock-up signatory, (ii) any trust or other legal entity for which a lock-up signatory or the spouse of a lock-up signatory serves as trustee or investment advisor, or (iii) any member of the immediate family of a lock-up signatory, or any trust or other legal entity for the direct or indirect benefit of a lock-up signatory or any member of the immediate family of a lock-up signatory;

transfers of shares of our common stock, or any securities convertible into, exercisable or exchangeable for our common stock, pursuant to a sale of, or an offer to purchase, 100% of our outstanding common stock, whether pursuant to a merger, tender offer or otherwise, to a third party or group of third parties, provided that in the event that such tender offer, merger, or transaction is not completed, our common stock and any security convertible into or exchangeable for our common stock shall remain subject to the same restrictions; or

with respect to certain of our officers and directors, sales of shares of our common stock pursuant to trading plans that comply with Rule 10b5-1 under the Exchange Act adopted prior to the date of this prospectus supplement, which sales may trigger a filing or reporting requirement or obligation, including but not limited to a filing of Form 4 of Section 16 of the Exchange Act to reflect a reduction in beneficial ownership resulting from such sales;

provided, however, that in the case of any transfer or distribution pursuant to the fifth, sixth, ninth or tenth clauses above, each donee, distributee or transferee shall sign and deliver a lock-up agreement substantially in the form of the lock-up agreements described above; and in the case of any transaction, transfer, exercise or distribution pursuant to the fourth, fifth, sixth, eighth, ninth or tenth clauses above, no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares of our common stock, shall be required or shall be voluntarily made during the restricted period (other than a filing on Form 5 made after the expiration of the restricted period).

The underwriter, in its sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time with or without notice.

In order to facilitate the offering of the common stock, the underwriter may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriter may sell more shares than it is obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriter under the option. The underwriter can close out a covered short sale by exercising the option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriter will consider, among other things, the open market price of shares compared to the price available under the option. The underwriter may also sell shares in excess of the option, creating a naked short position. The underwriter must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriter is concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in this offering. As an additional means of facilitating this offering, the underwriter may bid for, and purchase, shares of common stock in the open market to stabilize the price of the common stock. These activities may raise or maintain the market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock. The underwriter is not required to engage in these activities and may end any of these activities at any time.

We and the underwriter have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act.

A prospectus supplement in electronic format may be made available on websites maintained by the underwriter, or selling group members, if any, participating in this offering. The underwriter may agree to allocate a number of shares of common stock to itself for sale to its online brokerage account holders.

S-17

Table of Contents

Other Relationships

The underwriter and its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. The underwriter and its affiliates have, from time to time, performed, and/or may in the future perform, various financial advisory and investment banking services for us, for which it received or will receive customary fees and expenses.

In addition, in the ordinary course of their various business activities, the underwriter and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve our securities and instruments. The underwriter and its affiliates may also make investment recommendations or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission (the ASIC), in relation to the offering. This prospectus supplement does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the Corporations Act), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the securities may only be made to persons (the Exempt Investors) who are sophisticated investors (within the meaning of section 708(8) of the Corporations Act), professional investors (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the securities without disclosure to investors under Chapter 6D of the Corporations Act.

The securities applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring securities must observe such Australian on-sale restrictions.

This prospectus supplement contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus supplement is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in United Kingdom

This document is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) to investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the Order) or (iii) high net worth entities, and other persons to whom it may lawfully be

communicated, falling with Article 49(2)(a) to (d) of the Order (all such persons together being referred to as relevant persons). The securities are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such securities will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

S-18

Table of Contents

European Economic Area

In relation to each Member State of the European Economic Area that has implemented the Prospectus Directive (each, a Relevant Member State), from and including the date on which the European Union Prospectus Directive (the EU Prospectus Directive) was implemented in that Relevant Member State (the Relevant Implementation Date), an offer of securities described in this prospectus supplement may not be made to the public in that Relevant Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the EU Prospectus Directive, except that, with effect from and including the Relevant Implementation Date, an offer of securities described in this prospectus supplement may be made to the public in that Relevant Member State at any time:

to any legal entity which is a qualified investor as defined under the EU Prospectus Directive;

to fewer than 150 natural or legal persons (other than qualified investors as defined in the EU Prospectus Directive), subject to obtaining the prior consent of the representative for such offer; or

in any other circumstances falling within Article 3(2) of the EU Prospectus Directive; provided that no such offer of securities described in this prospectus supplement shall result in a requirement for the publication by us of a prospectus pursuant to Article 3 of the EU Prospectus Directive and each person who initially acquires any securities or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with the underwriter and us that it is a qualified investor within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive.

In the case of any securities being offered to a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the securities acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any securities to the public other than their offer or resale in a Relevant Member State to qualified investors as so defined or in circumstances in which the prior consent of the underwriter has been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an offer of securities to the public in relation to any securities in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe for the securities, as the same may be varied in that Member State by any measure implementing the EU Prospectus Directive in that Member State. The expression EU Prospectus Directive means Directive 2003/71/EC (and any amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State) and includes any relevant implementing measure in each Relevant Member State, and the expression 2010 PD Amending Directive means Directive 2010/73/EU.

Notice to Prospective Investors in Hong Kong

The shares may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a prospectus within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares which are or are intended to be

Table of Contents

disposed of only to persons outside Hong Kong or only to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Notice to Prospective Investors in Singapore

This prospectus supplement and the accompanying prospectus have not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the SFA), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for six months after that corporation or that trust has acquired the shares under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

Notice to Prospective Investors in Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law) and the underwriter has agreed that it not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (the SIX) or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority, and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment

Schemes (CISA). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

S-20

Table of Contents

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus supplement and the accompanying prospectus relate to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority (the DFSA). This prospectus supplement and the accompanying prospectus are intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement or the accompanying prospectus nor taken steps to verify the information set forth herein and has no responsibility for this prospectus supplement or the accompanying prospectus. The shares to which this prospectus supplement and the accompanying prospectus relate may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus supplement and the accompanying prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Canada

The common stock may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the common stock must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus supplement, the accompanying prospectus and the information incorporated by reference (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriter is not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Table of Contents

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Ropes & Gray LLP, Boston, Massachusetts. Certain legal matters will be passed upon for the underwriter by Latham & Watkins LLP.

EXPERTS

The consolidated financial statements of Akebia Therapeutics, Inc. incorporated by reference in this prospectus supplement from Akebia Therapeutics, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2017 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information and reporting requirements of the Exchange Act, under which we file periodic reports, proxy and information statements and other information with the SEC. Copies of the reports, proxy statements and other information may be examined without charge at the Public Reference Room of the SEC, 100 F Street, N.E., Washington, D.C. 20549, or on the Internet at <http://www.sec.gov>. Copies of all or a portion of such materials can be obtained from the Public Reference Room of the SEC upon payment of prescribed fees. Please call the SEC at 1-800-SEC-0330 for further information about the Public Reference Room.

We have filed a registration statement on Form S-3 with the SEC under the Securities Act with respect to the securities being offered pursuant to this prospectus supplement. This prospectus supplement and the accompanying prospectus omit certain information contained in the registration statement on Form S-3, as permitted by the SEC. Refer to the registration statement on Form S-3, including the exhibits, for further information about us and the securities being offered pursuant to this prospectus supplement. Statements in this prospectus supplement and the accompanying prospectus regarding the provisions of documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the registration statement, including the documents incorporated by reference or the exhibits, may be obtained upon payment of the prescribed rates at the offices of the SEC listed above and through the SEC's website.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

We incorporate by reference in this prospectus supplement and the accompanying prospectus the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until we have sold all of the securities to which this prospectus supplement relates. Any statement in a document incorporated by reference is an important part of this prospectus supplement and the accompanying prospectus. Any statement in a document incorporated by reference in this prospectus supplement and the accompanying prospectus will be deemed to be modified or superseded to the extent a statement contained in this prospectus supplement, the accompanying prospectus or any subsequently filed document that is incorporated by reference in this prospectus supplement and the accompanying prospectus modifies or supersedes such statement.

We incorporate by reference in this prospectus supplement and the accompanying prospectus only the documents set forth below that have been previously filed with the SEC:

our Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on March 12, 2017;

S-22

Table of Contents

our Definitive Proxy Statement, filed with the SEC on May 1, 2017 (but only the information set forth therein that is incorporated by reference into Part III of our Annual Report on Form 10-K for the year ended December 31, 2016); and

our Description of Capital Stock, which is contained in the Registration Statement on Form 8-A, as filed with the SEC on March 12, 2014 and including any amendments or reports filed for the purpose of updating such description.

We will provide without charge to each person to whom a copy of this prospectus supplement is delivered, upon the written or oral request of such person, a copy of any or all of the documents incorporated by reference (other than exhibits to those documents, unless the exhibits are specifically incorporated by reference into those documents). Requests should be directed to Investor Relations, Akebia Therapeutics, Inc., 245 First Street, Suite 1100, Cambridge, Massachusetts 02142 or may be made by phone by calling (617) 871-2098.

S-23

Table of Contents

PROSPECTUS

Akebia Therapeutics, Inc.

Common Stock

Preferred Stock

Warrants

Units

We may offer and sell from time to time, in one or more series or issuances and on terms that we will determine at the time of the offering, shares of our common stock, preferred stock or warrants, as well as units comprised of these securities, as described in this prospectus. The preferred stock and warrants may be convertible into, or exercisable or exchangeable for, common or preferred stock or other securities of Akebia Therapeutics, Inc. In addition, selling security holders to be named in a prospectus supplement may offer and sell our securities from time to time in one or more transactions in amounts, at prices and on terms that will be determined at the time of offering.

This prospectus describes some of the general terms of these securities. The specific terms of the securities to be offered and other information as to the terms and matters related to a specific offering will be described in one or more prospectus supplements to this prospectus. The prospectus supplements may also add to, update or change the information contained in this prospectus. This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement. You should read carefully both this prospectus and any prospectus supplement before making your investment decision.

These securities may be offered and sold in the same offering or in separate offerings, to or through underwriters, dealers, and agents or directly to purchasers. The names of any underwriters, dealers or agents involved in the sale of our securities and their compensation will be described in the applicable prospectus supplement.

Our common stock is traded on The NASDAQ Global Market under the symbol AKBA.

Investing in our securities involves risks. See Risk Factors on page 3 and in the applicable prospectus supplement.

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

to the contrary is a criminal offense.

Prospectus dated March 12, 2018.

Table of Contents

TABLE OF CONTENTS

<u>ABOUT THIS PROSPECTUS</u>	1
<u>ABOUT AKEBIA THERAPEUTICS, INC.</u>	2
<u>RISK FACTORS</u>	3
<u>CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	3
<u>USE OF PROCEEDS</u>	4
<u>SELLING SECURITYHOLDERS</u>	5
<u>PLAN OF DISTRIBUTION</u>	6
<u>DESCRIPTION OF CAPITAL STOCK</u>	7
<u>DESCRIPTION OF WARRANTS</u>	11
<u>DESCRIPTION OF UNITS</u>	12
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	13
<u>INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE</u>	13
<u>LEGAL MATTERS</u>	14
<u>EXPERTS</u>	14

You should rely only on the information contained in, or incorporated by reference into, this prospectus. We have not authorized anyone to give you information different from that contained in this prospectus. We are not making an offer to sell these securities in any jurisdiction where the offer is not permitted. The information contained in this prospectus is accurate only as of the date on the front cover of this prospectus, regardless of when this prospectus is delivered or when any sale of our securities occurs. Our business, financial condition, results of operations and prospects may have changed since that date.

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, using a shelf registration process. Under this shelf registration process, we may offer to sell any combination of the securities described in this prospectus in one or more offerings and selling securityholders may offer such securities owned by them from time to time. Each time we or selling securityholders sell securities under this shelf registration statement, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and the applicable prospectus supplement, including all documents incorporated herein and therein by reference, together with additional information described under **Where You Can Find More Information** below.

This prospectus does not include all of the information that is in the registration statement. We omitted certain parts of the registration statement from this prospectus as permitted by the SEC. We refer you to the registration statement and its exhibits for additional information about us and the securities that may be sold under this prospectus.

We have not authorized any dealer, agent or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and any accompanying prospectus supplement. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or an accompanying prospectus supplement. This prospectus and the accompanying prospectus supplement, if any, do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and the accompanying prospectus supplement constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus and the accompanying prospectus supplement, if any, is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus and any accompanying prospectus supplement is delivered or securities are sold on a later date.

References in this prospectus to **Akebia**, the **Company**, **we**, **us**, **our** and similar names are to Akebia Therapeutics and its subsidiaries unless we state otherwise or the context otherwise requires.

Table of Contents

ABOUT AKEBIA THERAPEUTICS, INC.

Akebia Therapeutics, Inc. is a biopharmaceutical company focused on developing and commercializing novel therapeutics for patients based on hypoxia-inducible factor, or HIF, biology, and building its pipeline while leveraging its development and commercial expertise in renal disease. HIF is the primary regulator of the production of red blood cells in the body, as well as other important metabolic functions. Pharmacologic modulation of the HIF pathway may have broad therapeutic applications. Akebia's lead product candidate, vadadustat, is an oral therapy in Phase 3 development and has the potential to set a new standard of care in the treatment of anemia due to chronic kidney disease. Akebia's management team has extensive experience in developing and commercializing drugs for the treatment of renal and metabolic disorders, as well as a deep understanding of HIF biology. This unique combination of HIF and renal expertise is enabling Akebia to advance a pipeline of HIF-based therapies to potentially address serious diseases.

Akebia was incorporated in 2007 under the laws of the State of Delaware. Our principal executive offices are located at 245 First Street, Suite 1100, Cambridge, MA, 02142. Our telephone number is (617) 871-2098 and our website address is www.akebia.com. The information contained in, and that can be accessed through, our website is not incorporated into and does not form a part of this prospectus.

Table of Contents

RISK FACTORS

Investing in our securities involves a high degree of risk. See Item 1A Risk Factors in our most recent Annual Report on Form 10-K incorporated by reference in this prospectus, in any subsequent Quarterly Report on Form 10-Q, and the Risk Factors section in the applicable prospectus supplement for a discussion of the factors you should carefully consider before deciding to purchase our securities.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the other documents we have filed with the SEC that are incorporated herein by reference contain forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words anticipate, believe, contemplate, continue, could, designed, estimate, expect, goal, intend, likely, may, plan, possible, potential, predict, project, strategy, seek, should, similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. In particular, you should consider the numerous risks described in our Annual Report on Form 10-K for the year ended December 31, 2017 and any subsequent Quarterly Reports on Form 10-Q, each incorporated by reference in this prospectus, and in the Risk Factors section in the applicable prospectus supplement (see Where You Can Find More Information).

Future results, levels of activity, performance and achievements may not match those expressed or implied in forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. Unless required by law, we do not undertake, and we specifically disclaim any obligation to release publicly the result of any revisions which may be made to any forward-looking statements to reflect events or circumstances after the date of such statements or to reflect the occurrence of events, whether or not anticipated. In that respect, we wish to caution readers not to place undue reliance on any such forward-looking statements, which speak only as of the date they are made.

Table of Contents

USE OF PROCEEDS

Except as otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds we receive from our sale of the securities covered by this prospectus for general corporate purposes, which may include working capital, capital expenditures, research and development expenditures, clinical trial expenditures, commercial expenditures and possible acquisitions or in-licenses of product candidates. Additional information on the use of net proceeds we receive from the sale of securities covered by this prospectus may be set forth in the prospectus supplement relating to the specific offering. We would not receive proceeds from sales by our securities holders.

Table of Contents

SELLING SECURITYHOLDERS

Selling securityholders are persons or entities that, directly or indirectly, have acquired or will from time to time acquire from us, our securities in various private transactions. Such selling securityholders may be parties to registration rights agreements with us, or we otherwise may have agreed or will agree to register their securities for sale. The initial purchasers of our securities, as well as their transferees, pledgees, donees or successors, all of whom we refer to as selling securityholders, may from time to time offer and sell the securities pursuant to this prospectus and any applicable prospectus supplement.

The applicable prospectus supplement will set forth the name of each selling securityholder and the number of and type of securities beneficially owned by such selling securityholder that are covered by such prospectus supplement. The applicable prospectus supplement will also disclose whether any of the selling securityholders have held any position or office with, have been employed by or otherwise have had a material relationship with us during the three years prior to the date of the prospectus supplement.

Table of Contents

PLAN OF DISTRIBUTION

We and any selling securityholder may sell securities in any of the ways described below or in any combination:

to or through underwriters or dealers;

through one or more agents;

directly to purchasers or to a single purchaser; or

through a combination of any of these methods.

The distribution of the securities may be effected from time to time in one or more transactions:

at a fixed price, or prices, which may be changed from time to time;

at market prices prevailing at the time of sale;

at prices related to such prevailing market prices; or

at negotiated prices.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

The prospectus supplement will describe the terms of the offering of the securities.

We will identify the specific plan of distribution, including any underwriters, dealers, agents or direct purchasers, and their compensation in a prospectus supplement. Only the agents or underwriters named in each prospectus supplement are agents or underwriters in connection with the securities being offered thereby.

Table of Contents

DESCRIPTION OF CAPITAL STOCK

General

The following description of certain terms of our capital stock is intended as a summary only and is qualified in its entirety by reference to our Ninth Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, and to the applicable provisions of the Delaware General Corporation Law. We refer in this section to our Ninth Amended and Restated Certificate of Incorporation as our certificate of incorporation, and we refer to our Amended and Restated Bylaws as our bylaws.

Our authorized capital stock consists of 175,000,000 shares of our common stock, par value \$0.00001 per share, and 25,000,000 shares of undesignated preferred stock, par value \$0.00001 per share.

As of December 31, 2017, we had issued and outstanding:

47,612,619 shares of our common stock;

options to purchase a total of 3,660,014 shares of our common stock with a weighted-average exercise price of \$9.47 per share, restricted stock units that vest into 728,738 shares of our common stock and warrants to purchase 509,611 shares of our common stock.

As of December 31, 2017, we had approximately 24 holders of record of our common stock.

Common Stock

Dividend Rights. Subject to preferences that may apply to shares of preferred stock outstanding at the time, holders of outstanding shares of common stock are entitled to receive dividends out of assets legally available at the times and in the amounts as the Board of Directors may from time to time determine.

Voting Rights. Each outstanding share of common stock is entitled to one vote on all matters submitted to a vote of stockholders. Holders of shares of our common stock shall have no cumulative voting rights.

Conversion or Redemption Rights. Our common stock is neither convertible nor redeemable.

Liquidation Rights. Upon our liquidation, dissolution or winding up, the holders of our common stock will be entitled to receive pro rata our assets which are legally available for distribution, after payment of all debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock.

Rights and Preferences. Holders of common stock have no preemptive, conversion or subscription rights and there are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Preferred Stock

Under our certificate of incorporation, we are authorized to issue up to 25,000,000 shares of preferred stock at \$0.00001 par value per share. The preferred stock may be issued in one or more series, and the Board of Directors is expressly authorized (i) to fix the descriptions, powers, preferences, rights, qualifications, limitations and restrictions with respect to any series of preferred stock and (ii) to specify the number of shares of any series of preferred stock. As of December 31, 2017, there were no shares of preferred stock issued and outstanding.

The prospectus supplement relating to any preferred stock being offered will include specific terms relating to the offering.

Table of Contents

Anti-Takeover Effects of Our Certificate of Incorporation and Our Bylaws

Our certificate of incorporation and bylaws contain certain provisions that are intended to enhance the likelihood of continuity and stability in the composition of the Board of Directors and which may have the effect of delaying, deferring or preventing a future takeover or change in control of our company unless such takeover or change in control is approved by the Board of Directors.

These provisions include:

Classified Board. Our certificate of incorporation provides that our Board of Directors is divided into three classes of directors, with the classes as nearly equal in number as possible. As a result, approximately one-third of our Board of Directors is elected each year. The classification of directors has the effect of making it more difficult for stockholders to change the composition of our Board. Our certificate of incorporation also provides that, subject to any rights of holders of preferred stock to elect additional directors under specified circumstances, the number of directors shall be fixed exclusively pursuant to a resolution adopted by our Board of Directors.

Action by Written Consent; Special Meetings of Stockholders. Our certificate of incorporation provides that stockholder action can be taken only at an annual or special meeting of stockholders and cannot be taken by written consent in lieu of a meeting. Our certificate of incorporation and the bylaws also provide that, except as otherwise required by law, special meetings of the stockholders can be called only by or at the direction of the Board of Directors pursuant to a resolution adopted by a majority of the total number of directors. Stockholders are not permitted to call a special meeting or to require the Board of Directors to call a special meeting.

Removal of Directors. Our certificate of incorporation provides that our directors may be removed only for cause by the affirmative vote of at least 75% of the votes that all our stockholders would be entitled to cast in an annual election of directors, voting together as a single class, at a meeting of the stockholders called for that purpose. This requirement of a supermajority vote to remove directors could enable a minority of our stockholders to prevent a change in the composition of our Board.

Advance Notice Procedures. Our bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to the Board of Directors. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the Board of Directors or by a stockholder who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given our Secretary timely written notice, in proper form, of the stockholder's intention to bring that business before the meeting. Although the bylaws do not give the Board of Directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting, the bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of our company.

Super Majority Approval Requirements. The Delaware General Corporation Law generally provides that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or bylaws, unless either a corporation's certificate of incorporation or bylaws requires a greater percentage. A majority vote of our Board of Directors or the affirmative vote of holders of at least 75% of the total votes of the outstanding shares of capital stock of our company entitled to vote with respect thereto, voting together as a single class, are required to amend, alter, change or repeal the bylaws. In addition, the affirmative vote of the holders of at least 75% of the total votes of the outstanding shares of capital stock of our company entitled to vote

with respect thereto, voting together as a single class, are required to amend, alter, change or repeal, or to adopt any provisions inconsistent with, any of the provisions in our certificate of incorporation relating to amendments to our certificate of incorporation and bylaws. This requirement of a supermajority vote to approve amendments to our bylaws and certificate of incorporation could enable a minority of our stockholders to exercise veto power over any such amendments.

Table of Contents

Authorized but Unissued Shares. Our authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital and corporate acquisitions. The existence of authorized but unissued shares of common stock and preferred stock could render more difficult or discourage an attempt to obtain control of a majority of our common stock by means of a proxy contest, tender offer, merger or otherwise.

Exclusive Forum. Our certificate of incorporation provides that, subject to limited exceptions, the state or federal courts located in the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) 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, (iii) any action asserting a claim against us arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws, or (iv) 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 certificate of incorporation described above. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against our directors and officers. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with one or more actions or proceedings described above, a court could find the choice of forum provisions contained in our certificate of incorporation to be inapplicable or unenforceable.

Section 203 of the Delaware General Corporation Law

We are subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A business combination includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns, or did own within three years prior to the determination of interested stockholder status, 15% or more of the corporation's voting stock.

Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions: before the stockholder became interested, the Board of Directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder; upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 75% of the voting stock of the corporation outstanding at the time the transaction commenced (excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances); or at or after the time the stockholder became interested, the business combination was approved by the Board of Directors of the corporation and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

A Delaware corporation may opt out of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders amendment approved by at least a majority of the outstanding voting shares. We have not opted out of these provisions. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

Table of Contents

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC.

Listing

Our common stock has been listed on The NASDAQ Global Market under the symbol AKBA.

Table of Contents

DESCRIPTION OF WARRANTS

We may issue warrants to purchase shares of our common stock or preferred stock in one or more series together with other securities or separately, as described in each applicable prospectus supplement. Below is a description of certain general terms and provisions of the warrants that we and the selling securityholders may offer. Particular terms of the warrants will be described in the applicable warrant agreements and the applicable prospectus supplement for the warrants.

As of December 31, 2017, we had issued and outstanding 509,611 warrants to purchase shares of our common stock.

The applicable prospectus supplement will contain, where applicable, the following terms of and, other information relating to, the warrants:

the specific designation and aggregate number of, and the price at which we will issue, the warrants;

the currency or currency units in which the offering price, if any, and the exercise price are payable;

the designation, amount and terms of the securities purchasable upon exercise of the warrants;

if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise, and a description of that class or series of our preferred stock;

the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if the warrants may not be continuously exercised throughout that period, the specific date or dates on which the warrants may be exercised;

whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;

certain material U.S. federal income tax consequences, if applicable;

the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;

the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;

if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;

information with respect to book-entry procedures, if any;

the anti-dilution provisions of the warrants, if any;

any redemption or call provisions;

whether the warrants are to be sold separately or with other securities as parts of units; and

any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants will be set forth in the applicable prospectus supplement.

Table of Contents

DESCRIPTION OF UNITS

The applicable prospectus supplement will describe the terms of any units. The following description of units in the applicable prospectus supplement may not be complete and is subject to, and is qualified in its entirety by reference to, the unit agreement and, if applicable, collateral arrangements and depositary arrangements relating to such units that we will file with the SEC in connection with a public offering of units.

We may issue, in one or more series, units consisting of common stock, preferred stock, and/or warrants for the purchase of common stock and/or preferred stock in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

The applicable prospectus supplement may describe:

the designation and terms of the units and of the securities composing the units, including whether and under what circumstances those securities may be held or transferred separately;

any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities composing the units; and

whether the units will be issued in fully registered or global form.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-3 with the SEC for the securities offered by this prospectus. This prospectus does not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information.

We are required to file annual and quarterly reports, current reports, proxy statements, and other information with the SEC. We make these documents publicly available, free of charge, on our website at www.akebia.com as soon as reasonably practicable after filing such documents with the SEC. The information contained on our website is not part of this prospectus. You can read our SEC filings, including the registration statement, on the SEC's website at <http://www.sec.gov>. You also may read and copy any document we file with the SEC at its public reference facility at:

Public Reference Room

100 F Street N.E.

Washington, DC 20549

Please call the SEC at 1-800-732-0330 for further information on the operation of the public reference facilities.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information in documents that we file later with the SEC will automatically update and supersede information in this prospectus. We incorporate by reference into this prospectus the documents listed below and any future filings made by us with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act, except for information furnished under Items 2.02, 7.01 or 9.01 on Form 8-K or other information furnished to the SEC which is not deemed filed and not incorporated in this prospectus, until the termination of the offering described in the applicable prospectus supplement. We hereby incorporate by reference the following documents:

our Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the SEC on March 12, 2018; and

our Description of Common Stock, which is contained in the Registration Statement on Form 8-A, as filed with the SEC on March 12, 2014 and including any amendments or reports filed for the purpose of updating such description.

We will provide without charge upon written or oral request to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any and all of the documents which are incorporated by reference in this prospectus but not delivered with this prospectus (other than exhibits unless such exhibits are specifically incorporated by reference in such documents). You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

Investor Relations

Edgar Filing: Akebia Therapeutics, Inc. - Form 424B5

Akebia Therapeutics, Inc.

245 First Street, Suite 1100

Cambridge, Massachusetts 02142

(617) 871-2098

Copies of these filings are also available, without charge, on the SEC's website at www.sec.gov and on our website at www.akebia.com as soon as reasonably practicable after they are filed electronically with the SEC. The information contained on our website is not a part of this prospectus.

Table of Contents

LEGAL MATTERS

The validity of the issuance of the securities offered pursuant to this prospectus will be passed upon for us by Ropes & Gray LLP, Boston, Massachusetts. The validity of any securities will be passed upon for any underwriters or agents by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of Akebia Therapeutics, Inc. appearing in Akebia Therapeutics, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2017 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

Table of Contents