

---

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

---

**FORM S-3  
REGISTRATION STATEMENT**  
*UNDER  
THE SECURITIES ACT OF 1933*

---

**AKEBIA THERAPEUTICS, INC.**

(Exact name of registrant as specified in its charter)

---

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

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

**245 First Street, Suite 1100  
Cambridge, MA 02142  
(617) 871-2098**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive office)

---

**John P. Butler**  
**President and Chief Executive Officer**  
**Akebia Therapeutics, Inc.**  
**245 First Street, Suite 1100**  
**Cambridge, MA 02142**  
**(617) 871-2098**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

---

*With copies to:*

**Paul M. Kinsella**  
**Ropes & Gray LLP**  
**Prudential Tower**  
**800 Boylston Street**  
**Boston, MA 02199**  
**(617) 951-7000**

**Nicole R. Hadas**  
**Senior Vice President,**  
**General Counsel and Secretary**  
**Akebia Therapeutics, Inc.**  
**245 First Street, Suite 1100**  
**Cambridge, MA 02142**  
**(617) 871-2098**

---

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

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 as amended, or Securities Act, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

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

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer

Accelerated filer

Non-accelerated filer  (Do not check if a smaller reporting company)

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act.

---

**CALCULATION OF REGISTRATION FEE**

| <b>Title of each class of securities to be registered</b> | <b>Amount to be Registered(1)</b> | <b>Proposed Maximum Offering Price per Unit(1)</b> | <b>Proposed Maximum Aggregate Offering Price(1)</b> | <b>Amount of Registration Fee(2)</b> |
|---|-----------------------------------|--|---|--------------------------------------|
| Common Stock, \$0.00001                                   |                                   |  |   |                                      |
| Preferred Stock, \$0.00001                                |                                   |  |   |                                      |
| Warrants  |                                   |  |   |                                      |
| Units   |                                   |  |   |                                      |
| Total   |                                   |  |   |                                      |

- (1) An indeterminate aggregate initial offering price or number of securities of each identified class is being registered as may from time to time be issued at indeterminate prices, including securities that may be issued upon exercise, conversion or exchange of, or pursuant to anti-dilution adjustments with respect to any securities that are issuable on exercise, conversion or exchange of other securities.
- (2) In accordance with Rules 456(b) and 457(r) of the Securities Act of 1933, as amended, the registrant is deferring payment of all of the registration fee. In connection with the securities offered hereby, the registrant will pay “pay-as-you-go registration fees” in accordance with Rule 456(b) under the Securities Act of 1933, as amended.
-

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**

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

## 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, Inc. and its subsidiaries unless we state otherwise or the context otherwise requires.

**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](http://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.

## **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,” “forecast,” “future,” “goal,” “intend,” “likely,” “may,” “plan,” “possible,” “potential,” “predict,” “project,” “strategy,” “seek,” “should,” “target,” “will,” “would,” and 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.

## 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.



## 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.

## 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.

## 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.

## **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.”

## 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.

## 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.



## 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](http://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  
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](http://www.sec.gov) and on our website at [www.akebia.com](http://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.

## **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.

**PART II**  
**INFORMATION NOT REQUIRED IN PROSPECTUS**

**Item 14. Other Expenses of Issuance and Distribution.**

The following table sets forth the various expenses in connection with the sale and distribution of the securities being registered.

|   |      |
|---|------|
| Securities and Exchange Commission registration fee | \$ * |
| Printing and engraving expenses                     | **   |
| Legal fees and expenses                             | **   |
| Accounting fees and expenses                        | **   |
| Transfer Agent and Registrar fees                   | **   |
| Miscellaneous                                       | **   |
| Total   | \$** |

\* Applicable SEC registration fees have been deferred in accordance with Rules 456(b) and 457(r) of the Securities Act, and are not estimated at this time.

\*\* These fees are calculated based on the number of issuances and the amount of securities offered and accordingly cannot be estimated at this time.

**Item 15. Indemnification of Directors and Officers.**

The registrant's ninth amended and restated certificate of incorporation contains provisions that eliminate, to the maximum extent permitted by the General Corporation Law of the State of Delaware, or DGCL, the personal liability of directors and executive officers for monetary damages for breach of their fiduciary duties as a director or officer. The registrant's ninth amended and restated certificate of incorporation and amended and restated bylaws provide that the registrant shall indemnify its directors and executive officers and may indemnify its employees and other agents to the fullest extent permitted by the DGCL.

Section 145 of the DGCL empowers a Delaware corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the rights of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person. The statute provides that it is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise.

Section 102(b)(7) of the DGCL permits a corporation to provide in its charter that a director of the corporation will not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) for payments of unlawful dividends or unlawful stock purchases or redemptions, or (4) for any transaction from which the director derived an improper personal benefit.

The registrant has entered into indemnification agreements with each of its directors and certain officers, in addition to the indemnification provided for in the registrant's ninth amended and restated certificate of incorporation and amended and restated bylaws.

The registrant maintains insurance on behalf of any person who is or was a director or officer of the registrant against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

## Table of Contents

### **Item 16. Exhibits.**

The following is a list of exhibits filed as part of this registration statement.

| <u>Exhibit</u> | <u>Description</u>   |
|----------------|--|
| 1.1            | Underwriting Agreement†  |
| 3.1            | <a href="#">Ninth Amended and Restated Certificate of Incorporation (incorporated by reference to exhibit 3.1 to the Company's Current Report on Form 8-K, filed on March 28, 2014)</a>  |
| 3.2            | <a href="#">Amended and Restated Bylaws (incorporated by reference to exhibit 3.2 to the Company's Current Report on Form 8-K, filed on March 28, 2014)</a>  |
| 4.1            | <a href="#">Form of Common Stock Certificate (incorporated by reference to exhibit 4.1 to the Company's Registration Statement on Form S-1/A (333-193969), filed on March 4, 2014)</a>   |
| 4.2            | <a href="#">Fourth Amended and Restated Investors' Rights Agreement, dated March 5, 2014 (incorporated by reference to exhibit 4.4 to the Company's 10-K for the year ending December 31, 2014 and filed on March 4, 2015)</a> |
| 4.3            | <a href="#">Amendment No. 1 to Fourth Amended and Restated Investors' Rights Agreement, dated June 28, 2017*</a>   |
| 4.4            | Form of Warrant Agreement, including the form of security certificate.†  |
| 4.5            | Form of Unit Agreement, including the form of unit certificate.†   |
| 5.1            | <a href="#">Opinion of Ropes &amp; Gray LLP*</a>   |
| 23.1           | <a href="#">Consent of Ropes &amp; Gray LLP (included in Exhibit 5.1)*</a>   |
| 23.2           | <a href="#">Consent of Ernst &amp; Young LLP*</a>  |
| 24.1           | <a href="#">Power of attorney (included on the signature page)*</a>  |

\* Filed, or submitted electronically, herewith

† To be filed, if necessary, by amendment or as an exhibit to a document to be incorporated by reference herein in connection with an offering of the offered securities.

### **Item 17. Undertakings.**

(a) The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
  - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

## Table of Contents

- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

*Provided, however, that*

Paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
  - (A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
  - (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser: (i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424; (ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant; (iii) the portion of any other free writing prospectus relating to the offering

## Table of Contents

containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and (iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

- (6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act, and will be governed by the final adjudication of such issue.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on March 12, 2018.

AKEBIA THERAPEUTICS, INC.

By: /s/ John P. Butler

John P. Butler  
President and Chief Executive Officer

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints John P. Butler and Jason A. Amello, and each of them, either of whom may act without the joinder of the other, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place, and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto, and other documents in connection therewith with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or either of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

| SIGNATURES  | TITLE   | DATE           |
|---|---|----------------|
| <u>/s/ John P. Butler</u><br>John P. Butler         | Director, President and Chief Executive Officer<br>(Principal Executive Officer)                                | March 12, 2018 |
| <u>/s/ Jason A. Amello</u><br>Jason A. Amello       | Senior Vice President, Chief Financial Officer and<br>Treasurer<br>(Principal Financial and Accounting Officer) | March 12, 2018 |
| <u>/s/ Muneer A. Satter</u><br>Muneer A. Satter     | Chairman and Director   | March 12, 2018 |
| <u>/s/ Scott A. Canute</u><br>Scott A. Canute       | Director  | March 12, 2018 |
| <u>/s/ Michael D. Clayman</u><br>Michael D. Clayman | Director  | March 12, 2018 |
| <u>/s/ Maxine Gowen</u><br>Maxine Gowen             | Director  | March 12, 2018 |

[Table of Contents](#)

|   |          |                |
|---|----------|----------------|
| <u>/s/ Duane Nash</u><br>Duane Nash                       | Director | March 12, 2018 |
| <u>/s/ Ronald C. Renaud, Jr.</u><br>Ronald C. Renaud, Jr. | Director | March 12, 2018 |
| <u>/s/ Michael S. Wyzga</u><br>Michael S. Wyzga           | Director | March 12, 2018 |



**AMENDMENT NO. 1 TO  
FOURTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT**

THIS AMENDMENT NO. 1 TO FOURTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (this "Amendment") is made and entered into as of June 28, 2017, by and among Akebia Therapeutics, Inc., a Delaware corporation (the "Company"), the existing stockholders of the Company set forth on the signature pages hereto, and Satter Medical Technology Partners, L.P., a Delaware limited partnership ("SMTP").

WHEREAS, the Company previously entered into that certain Fourth Amended and Restated Investors' Rights Agreement (the "Investors' Rights Agreement"), dated March 5, 2014, by and among the Company and the investors set forth on Schedule A thereto;

WHEREAS, the Company desires to amend the terms of the Investors' Rights Agreement as set forth herein in order to (i) add SMTP as a party thereto with all of the rights and subject to all of the obligations of an Investor and a Holder of Registrable Securities (each, as defined in the Investors' Rights Agreement) thereunder and (ii) amend the definition of Registrable Securities set forth in Section 1 of the Investors' Rights Agreement;

WHEREAS, in accordance with Section 6.6 of the Investors' Rights Agreement, the Investors' Rights Agreement may be amended with the written consent of the Company and the holders of more than the Appropriate Percentage of the Registrable Securities (each, as defined in the Investors' Rights Agreement) then outstanding (the "Requisite Holders"); and

WHEREAS, the existing stockholders of the Company set forth on the signature pages hereto constitute the Requisite Holders for purposes of the Investors' Rights Agreement.

NOW, THEREFORE, for valid and adequate consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the other undersigned parties hereto, representing the Requisite Holders, hereby agree as follows:

1. Effective as of the date of this Amendment, SMTP (i) shall become a party to, and be bound by the currently existing provisions of, the Investors' Rights Agreement, as amended hereby, and (ii) for all purposes of the Investors' Rights Agreement, shall be considered an Investor and a Holder of Registrable Securities thereunder, and shall be entitled to the rights and benefits and subject to the duties and obligations of an Investor and a Holder of Registrable Securities thereunder, as fully as if it were an original signatory to the Investors' Rights Agreement in such capacities.

2. The definition of "Registrable Securities" set forth in Section 1 of the Investors' Rights Agreement is hereby amended and restated to read in its entirety as follows:

"Registrable Securities" means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock; (ii) any Common Stock issued or issuable (directly or indirectly) upon conversion and/or exercise of any other securities of

the Company, acquired by the Investors after the date hereof; (iii) any Common Stock acquired by a party to this Agreement directly from the Company, including any Common Stock acquired pursuant to an underwritten registered public offering by the Company; and (iv) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (i), (ii) and (iii) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Section 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Section 2.13 of this Agreement. As to any particular Registrable Securities, such shares shall cease to be Registrable Securities when (i) a registration statement with respect to the sale of such securities shall have become effective under the Securities Act and such securities shall have been disposed of in accordance with such registration statement, (ii) all securities of the Company held by the Investor thereof (and all securities held by any other Persons with which such Investor must aggregate its sales under Rule 144) may be distributed without volume limitation or other restrictions on transfer under Rule 144 (including without application of paragraphs (c), (e), (f) and (h) of Rule 144), or (iii) such securities shall have ceased to be outstanding.”

3. Except to the extent expressly amended hereby, all of the terms, provisions and conditions of the Investors’ Rights Agreement are hereby ratified and confirmed and shall remain in full force and effect to the extent such terms, provisions and conditions are in effect on the date hereof. From and after the effectiveness of this Amendment, the words “this Agreement,” “herein,” “hereof” and other like words in the Investors’ Rights Agreement shall mean and include the Investors’ Rights Agreement as amended hereby.

4. Notwithstanding anything to the contrary contained herein, any amendment, modification, termination or waiver of this Amendment shall be deemed to be an amendment, modification, termination or waiver of the Investors’ Rights Agreement and the provisions of Section 6.6 of the Investors’ Rights Agreement shall apply to such amendment, modification, termination or waiver mutatis mutandis.

5. This Amendment shall be governed by, and construed in accordance with, the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of law.

6. This Amendment may be executed and delivered by facsimile or PDF signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[This space intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 1 to Fourth Amended and Restated Investors' Rights Agreement as of the date first written above.

AKEBIA THERAPEUTICS, INC.

By: /s/ John P. Butler

Name: John P. Butler

Title: President and Chief Executive Officer

Address:

245 First Street

Cambridge, Massachusetts 02142

[Signature Page to Amendment to No. 1 to Fourth Amended and Restated Investor Rights Agreement]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 1 to Fourth Amended and Restated Investors' Rights Agreement as of the date first written above.

MUNEER A. SATTER REVOCABLE TRUST

By: /s/ Muneer A. Satter

Name: Muneer A. Satter

Title: Trustee

THE SATTER FOUNDATION

By: /s/ Muneer A. Satter

Name: Muneer A. Satter

Title: Trustee

SFT AK HOLDINGS, LLC

By: /s/ Muneer A. Satter

Name: Muneer A. Satter

Title: Manager

SCT AK HOLDINGS, LLC

By: /s/ Muneer A. Satter

Name: Muneer A. Satter

Title: Manager

Address for Satter Investors:

c/o Satter Investment Management, LLC  
676 North Michigan Avenue, Suite 4000  
Chicago, Illinois 60611  
Attention: Muneer A. Satter

With a copy (which shall not constitute notice) to:

Kirkland & Ellis LLP  
300 North LaSalle Street  
Chicago, Illinois 60654  
Attention: Ted H. Zook, P.C.  
Jon-Micheal A. Wheat

[Signature Page to Amendment to No. 1 to Fourth Amended and Restated Investor Rights Agreement]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 1 to Fourth Amended and Restated Investors' Rights Agreement as of the date first written above.

KHH AK HOLDINGS, LLC

By: /s/ Muneer A. Satter

Name: Muneer A. Satter

Title: Manager

RSFIT AK HOLDINGS, LLC

By: /s/ Muneer A. Satter

Name: Muneer A. Satter

Title: Manager

RHSIT AK HOLDINGS, LLC

By: /s/ Muneer A. Satter

Name: Muneer A. Satter

Title: Manager

ACWIT AK HOLDINGS, LLC

By: /s/ Muneer A. Satter

Name: Muneer A. Satter

Title: Manager

Address for Satter Investors:

c/o Satter Investment Management, LLC  
676 North Michigan Avenue, Suite 4000  
Chicago, Illinois 60611  
Attention: Muneer A. Satter

With a copy (which shall not constitute notice) to:

Kirkland & Ellis LLP  
300 North LaSalle Street  
Chicago, Illinois 60654  
Attention: Ted H. Zook, P.C.  
Jon-Micheal A. Wheat

[Signature Page to Amendment to No. 1 to Fourth Amended and Restated Investor Rights Agreement]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 1 to Fourth Amended and Restated Investors Rights' Agreement as of the date first written above.

GBHIT AK HOLDINGS, LLC

By: /s/ Muneer A. Satter

Name: Muneer A. Satter

Title: Manager

JWT AK HOLDINGS, LLC

By: /s/ Muneer A. Satter

Name: Muneer A. Satter

Title: Manager

MILLENIUM TRUST COMPANY  
CUSTODIAN FBO MUNEER A. SATTER IRA

By: /s/ Muneer A. Satter

Name: Muneer A. Satter

Title: Manager

Address for Satter Investors:

c/o Satter Investment Management, LLC  
676 North Michigan Avenue, Suite 4000  
Chicago, Illinois 60611  
Attention: Muneer A. Satter

With a copy (which shall not constitute notice) to:

Kirkland & Ellis LLP  
300 North LaSalle Street  
Chicago, Illinois 60654  
Attention: Ted H. Zook, P.C.  
Jon-Micheal A. Wheat

[Signature Page to Amendment to No. 1 to Fourth Amended and Restated Investor Rights Agreement]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 1 to Fourth Amended and Restated Investors' Rights Agreement as of the date first written above.

SATTER MEDICAL TECHNOLOGY PARTNERS, L.P.

By: Satter Medical Technology GP, L.P.  
Its: General Partner

By: Satter Medical Technology UGP, LLC  
Its: General Partner

By: Muneer A. Satter Revocable Trust  
Its: Managing Member

By: /s/ Muneer A. Satter  
Name: Muneer A. Satter  
Title: Trustee

Address for SMTP:

c/o Satter Investment Management, LLC  
676 North Michigan Avenue, Suite 4000  
Chicago, Illinois 60611  
Attention: Muneer A. Satter

With a copy (which shall not constitute notice) to:

Kirkland & Ellis LLP  
300 North LaSalle Street  
Chicago, Illinois 60654  
Attention: Ted H. Zook, P.C.  
Jon-Micheal A. Wheat

[Signature Page to Amendment to No. 1 to Fourth Amended and Restated Investor Rights Agreement]



ROPES & GRAY LLP  
PRUDENTIAL TOWER  
800 BOYLSTON STREET  
BOSTON, MA 02199-3600  
WWW.ROPESGRAY.COM

March 12, 2018

Akebia Therapeutics, Inc.  
245 First Street, Suite 1100  
Cambridge, Massachusetts 02142

Re: Registration of Securities by Akebia Therapeutics, Inc.

Ladies and Gentlemen:

We have acted as counsel to Akebia Therapeutics, Inc., a Delaware corporation (the "Company"), in connection with the registration statement on Form S-3 (the "Registration Statement") filed on the date hereof by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration under the Securities Act and the proposed issuance and sale from time to time pursuant to Rule 415 under the Securities Act of:

- (i) shares of the Company's common stock, \$0.00001 par value per share (the "Common Stock");
- (ii) shares of preferred stock of the Company, \$0.00001 par value per share (the "Preferred Stock");
- (iii) warrants representing the right to receive or the obligation to sell, upon exercise, a number of shares of Common Stock or Preferred Stock (the "Warrants"); and
- (iv) units consisting of any combination of Common Stock, Preferred Stock or Warrants (the "Units").

The Common Stock, the Preferred Stock, the Warrants and the Units are referred to herein collectively as the "Securities."

In connection with this opinion letter, we have examined such certificates, documents and records and have made such investigation of fact and such examination of law as we have deemed appropriate in order to enable us to render the opinions set forth herein. In conducting such investigation, we have relied, without independent verification, upon certificates of officers of the Company, public officials and other appropriate persons.

The opinions expressed below are limited to the Delaware General Corporation Law.

Based upon and subject to the foregoing and the assumptions, qualifications and limitations set forth below, we are of the opinion that:

1. When (i) the issuance and sale of any shares of Common Stock have been duly authorized by all necessary corporate action of the Company and (ii) such shares have been issued and delivered against payment of the purchase price therefor (in an amount in excess of the par value thereof) in accordance with the applicable purchase, underwriting or other agreement, and as contemplated by the Registration Statement, such shares of Common Stock will be validly issued, fully paid and nonassessable. The Common Stock covered in the opinion in this paragraph includes any shares of Common Stock that may be issued upon exercise, conversion or exchange pursuant to the terms of any other Securities.



2. When (i) the terms of any Preferred Stock of a particular series and their issuance and sale have been duly authorized by all necessary corporate action of the Company, (ii) a certificate of designations with respect to such series of Preferred Stock has been duly adopted by the Company and filed with the Secretary of State of the State of Delaware and (iii) such shares of Preferred Stock have been issued and delivered against payment of the purchase price therefor (in an amount in excess of the par value thereof) in accordance with the applicable purchase, underwriting or other agreement, and as contemplated by the Registration Statement, such shares of Preferred Stock will be validly issued, fully paid and nonassessable. The Preferred Stock covered in the opinion in this paragraph includes any shares of Preferred Stock that may be issued upon exercise, conversion or exchange pursuant to the terms of any other Securities.

3. When (i) the terms of any Warrants and their issuance and sale have been duly authorized by all necessary corporate action of the Company and (ii) such Warrants have been duly executed, countersigned and delivered in accordance with the applicable warrant agreement and against payment of the purchase price therefor in accordance with the applicable purchase, underwriting or other agreement, and as contemplated by the Registration Statement, such Warrants will constitute valid and binding obligations of the Company enforceable against the Company in accordance with their terms.

4. When (i) the terms of any Units (including the terms of the component Securities) and their sale have been duly authorized by all necessary corporate action of the Company and (ii) such Units have been duly executed (if the Units are represented by a separate instrument) and delivered in accordance with the applicable purchase, underwriting or other agreement, and as contemplated by the Registration Statement, such Units will constitute valid and binding obligations of the Company enforceable against the Company in accordance with their respective terms.

In rendering the opinions set forth above, we have assumed that (i) the Registration Statement will have become effective under the Securities Act, a prospectus supplement will have been prepared and filed with the Commission describing the Securities offered thereby and such Securities will have been issued and sold in accordance with the terms of such prospectus supplement; (ii) a definitive purchase, underwriting, or similar agreement, and any applicable warrant agreement, pursuant to which such Securities may be issued, will have been duly authorized, executed and delivered by the Company and the other parties thereto, and the specific terms of such Securities will have been duly established in conformity with the applicable agreement and the certificate of incorporation and bylaws of the Company (if applicable); (iii) at the time of the issuance of any Securities, the Company will be a validly existing corporation under the law of its jurisdiction of incorporation; (iv) the number of shares of Common Stock issued pursuant to the Registration Statement, together with the number of shares outstanding or reserved at the time of issuance, will not exceed the respective number of shares authorized by the Company's certificate of incorporation in effect at the time of such issuance; and (v) all the foregoing actions to be taken by the Company will have been taken so as not to violate any applicable law and so as to comply with any requirement or restriction imposed by any court or governmental or regulatory body having jurisdiction over the Company or any of its property.

Our opinions set forth above are subject to (a) bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance and similar laws affecting the rights and remedies of creditors generally and (b) general principles of equity.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement and to the use of our name therein and in the related prospectus under the caption "Legal Matters." In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Ropes & Gray LLP

Ropes & Gray LLP

**Consent of Independent Registered Public Accounting Firm**

We consent to the reference to our firm under the caption “Experts” in the Registration Statement (Form S-3) and related Prospectus of Akebia Therapeutics, Inc. for the registration of common stock, preferred stock, warrants, and units and to the incorporation by reference therein of our report dated March 12, 2018, with respect to the consolidated financial statements of Akebia Therapeutics, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2017, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts  
March 12, 2018