AERIE PHARMACEUTICALS INC
Form 424B7
August 22, 2018
**Table of Contents**

**Filed pursuant to Rule 424(b)(7)**

**Registration No. 333-213643**

**CALCULATION OF REGISTRATION FEE**

| Title of each class of securities to be registered | Amount to be registered(1) | Maximum offering price per share(2) | Maximum aggregate offering price(2) | Amount of registration fee(3) |
|---|---|---|---|---|
| Shares of common stock, par value $0.001 per share | 329,124 | $63.375 | $20,858,233.50 | $2,596.86 |

(1) The amount being registered includes an indeterminate number of shares which may be issued by Aerie Pharmaceuticals, Inc. with respect to such shares of common stock by way of a stock dividend, stock split or in connection with a stock combination, recapitalization, merger, consolidation or otherwise.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act of 1933, as amended, based upon the average of the high and low prices for the registrant s common stock on August 21, 2018 as reported by The NASDAQ Global Market.

(3) Payment of the registration fee at the time of filing of the registrant s registration statement on Form S-3, filed with the Securities and Exchange Commission on September 15, 2016 (File No. 333-213643) (the Registration Statement ), was deferred pursuant to Rules 456(b) and 457(r) under the Securities Act. The information in this Calculation of Registration Fee table (including the footnotes hereto) shall be deemed to update the Calculation of Registration Fee table in the Registration Statement.

Table of Contents

**Prospectus Supplement**

**(To Prospectus Dated September 15, 2016)**

**329,124 Shares of Common Stock**

This prospectus supplement relates to the resale from time to time by Deerfield Private Design Fund III, L.P. ( Deerfield Private Design ), Deerfield Partners, L.P. ( Deerfield Partners ) and Deerfield Special Situations Fund, L.P. ( Deerfield Special Situations and, together with Deerfield Private Design and Deerfield Partners, the Selling Stockholders ) of 329,124 shares of our common stock, par value $0.001 per share. The Selling Stockholders acquired the common stock from us in a private placement that occurred concurrently with the conversion of our former senior secured convertible notes (the Convertible Notes ). See Summary The Convertible Notes Exchange. The 329,124 shares of common stock are being registered in accordance with the Registration Rights Agreement, dated July 23, 2018 (the Registration Rights Agreement ), that we entered into with the Selling Stockholders. We are not selling any shares of our common stock under this prospectus supplement and will not receive any proceeds from any sale of shares of our common stock by the Selling Stockholders.

The Selling Stockholders may sell the shares of our common stock covered by this prospectus supplement in a number of different ways and at varying prices. See Plan of Distribution on page S-14. The Selling Stockholders will bear all discounts, concessions and commissions, if any, attributable to the sale or disposition of the shares, or interests therein. We will bear all costs, expenses and fees in connection with the registration of the resale of the shares. We will not be paying any discounts, concessions or commissions in connection with any resale.

Our common stock is listed on The Nasdaq Global Market under the symbol AERI. On August 22, 2018, the last reported sale price of our common stock on The Nasdaq Global Market was $61.85 per share.

**Investing in our common stock involves risks. You should carefully consider all of the information set forth in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference in this prospectus supplement and the accompanying base prospectus before deciding to invest in our common stock. Please see Risk Factors on page S-6 of this prospectus supplement and page 6 of the accompanying base prospectus and in the documents incorporated by reference in this prospectus supplement and the accompanying base prospectus to read about factors you should consider before buying shares of our common stock.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of 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 date of this prospectus supplement is August 22, 2018.**

Table of Contents

## TABLE OF CONTENTS

### Prospectus Supplement



### Prospectus

Table of Contents

## ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the terms on which the Selling Stockholders may sell the shares of common stock covered by this prospectus supplement from time to time and also adds to and updates information contained in the accompanying base prospectus and the documents incorporated by reference in the base prospectus. The second part, the accompanying base prospectus, gives more general information, some of which may not apply to sales by the Selling Stockholders. You should read both this prospectus supplement and the accompanying base prospectus before deciding to invest in our common stock.

To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying base prospectus or in any document incorporated by reference in this prospectus supplement having an earlier date than the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. You should also read and consider the additional information under the captions Information Incorporated by Reference and Where You Can Find More Information in this prospectus supplement.

The distribution of this prospectus supplement and the accompanying base prospectus and offers of our common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying base prospectus must inform themselves about, and observe any restrictions relating to, offers of our common stock and the distribution of this prospectus supplement and the accompanying base prospectus outside the United States. This prospectus supplement and the accompanying base prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities that may be offered by this prospectus supplement and the accompanying base prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

References in this prospectus supplement to the Company, Aerie, we, us and our and similar terms refer to Aerie Pharmaceuticals, Inc. and its subsidiaries.

Table of Contents

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the documents incorporated by reference contain 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 ). We may, in some cases, use terms such as predicts, believes, potential, proposed, continue, estimates, anticipates, expects, plans, intends, may, wou should, exploring, pursuing or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements.

Forward-looking statements appear in a number of places throughout this prospectus supplement and the documents incorporated by reference herein, and include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things:

- the commercial launch and potential future sales of Rhopressa® (netarsudil ophthalmic solution) 0.02% ( Rhopressa® ) and the commercial launch and potential future sales of Roclatan™ (netarsudil/latanoprost ophthalmic solution) 0.02%/0.005% ( Roclatan™ ) and any future product candidates, if approved;

- our commercialization, marketing, manufacturing and supply management capabilities and strategies;

- third-party payer coverage and reimbursement for Rhopressa® and Roclatan™, if approved, and any future product candidates, if approved;

- the glaucoma patient market size and the rate and degree of market adoption of Rhopressa® and Roclatan™ and any future product candidates, if approved, by eye care professionals and patients;

- the timing, cost or other aspects of the commercial launch of Rhopressa® and Roclatan™ and any future product candidates, if approved;

- the success, timing and cost of our ongoing and anticipated preclinical studies and clinical trials for Rhopressa®, with respect to regulatory approval outside the United States, Roclatan™ and any future product candidates, including statements regarding the timing of initiation and completion of the studies and trials;

- our expectations regarding the effectiveness of Rhopressa®, Roclatan™ and any future product candidates and results of our clinical trials and any potential preclinical studies;

- the timing of and our ability to request, obtain and maintain U.S. Food and Drug Administration ( FDA ) or other regulatory authority approval of, or other action with respect to, as applicable, Rhopressa®, Roclatan™ and any future product candidates in the United States, Canada, Europe, Japan and elsewhere, including the

expected timing of, and regulatory and/or other review of, filings for, as applicable, Rhopressa®, Roclatan™ and any future product candidates;

our expectations related to the use of proceeds from our financing activities and credit facility;

our estimates regarding anticipated operating expenses and capital requirements and our needs for additional financing;

our plans to pursue development of additional product candidates and technologies in ophthalmology, including development of Rhopressa® and Roclatan™ for additional indications, our preclinical retina programs and other therapeutic opportunities, and our plans to explore possible uses of our existing proprietary compounds beyond glaucoma and ophthalmology;

the potential advantages of Rhopressa®, Roclatan™ and any future product candidates;

our ability to protect our proprietary technology and enforce our intellectual property rights;

Table of Contents

our expectations regarding collaborations, licensing, acquisitions and strategic operations, including our ability to in-license or acquire additional ophthalmic products, product candidates or technologies; and

our stated objective of building a major ophthalmic pharmaceutical company.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events, competitive dynamics, industry change and other factors beyond our control, and depend on regulatory approvals and economic and other environmental circumstances that may or may not occur in the future or may occur on longer or shorter timelines than anticipated. We discuss many of these risks in greater detail under the heading Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2017 and our Quarterly Report on Form 10-Q for the quarterly periods ended March 31, 2018 and June 30, 2018, each incorporated by reference herein, and in other documents we may file with the SEC from time to time.

In particular, FDA approval of Rhopressa® does not constitute FDA approval of Roclatan™, and there can be no assurance that we will receive FDA approval for Roclatan™ or any future product candidates. FDA approval of Rhopressa® also does not constitute regulatory approval of Rhopressa® in jurisdictions outside the United States, and there can be no assurance that Rhopressa® will obtain regulatory approval in other jurisdictions. Our receipt of a Prescription Drug User Fee Act ( PDUFA ) goal date notification for Roclatan™ does not constitute FDA approval of the Roclatan™ New Drug Application ( NDA ), and there can be no assurance that the FDA will complete its review by the PDUFA goal date of March 14, 2019, that the FDA will not require changes or additional data that must be made or received before it will approve the NDA, if ever, or that the FDA will approve the NDA. In addition, the preclinical research discussed in this prospectus supplement and the documents incorporated by reference herein is preliminary and the outcome of such preclinical studies may not be predictive of the outcome of later clinical trials. Any future clinical trial results may not demonstrate safety and efficacy sufficient to obtain regulatory approval related to the preclinical research findings discussed in this prospectus supplement or the documents incorporated by reference herein, and we may suspend or discontinue research programs at any time for any reason.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus supplement and the documents incorporated by reference herein, we caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from the forward-looking statements contained in this prospectus supplement and the documents incorporated by reference herein. In addition, even if our results of operations, financial condition and liquidity, and events in the industry in which we operate are consistent with the forward-looking statements contained in this prospectus supplement and the documents incorporated by reference herein, they may not be predictive of results or developments in future periods.

Any forward-looking statements that we make in this prospectus supplement speak only as of the date of this prospectus supplement. Except as required by law, we are under no duty to update or revise any of the forward-looking statements, whether as a result of new information, future events or otherwise, after the date of this prospectus supplement.

Table of Contents

## SUMMARY

*This summary highlights information about this prospectus supplement and may not contain all of the information that may be important to you. You should read the following summary together with the more detailed information appearing elsewhere in this prospectus supplement and accompanying base prospectus, as well as the financial statements and related notes thereto and other information included in or incorporated by reference in this prospectus supplement before making any investment decision.*

### Our Company

We are an ophthalmic pharmaceutical company focused on the discovery, development and commercialization of first-in-class therapies for the treatment of patients with open-angle glaucoma, retina diseases and other diseases of the eye. Our first product, Rhopressa®, a once-daily eyedrop approved by the FDA for the reduction of elevated intraocular pressure in patients with open-angle glaucoma or ocular hypertension, was launched in the United States in April 2018. In clinical trials of Rhopressa®, the most common adverse reactions were conjunctival hyperemia, cornea verticillata, instillation site pain, and conjunctival hemorrhage. Our advanced-stage product candidate, Roclatan™, a fixed-dose combination of Rhopressa® and the widely-prescribed PGA (prostaglandin analog) latanoprost, achieved its 3-month primary efficacy endpoint in two Phase 3 registration trials, Mercury 1 and Mercury 2, and also showed safety and efficacy throughout 12 months in Mercury 1. We submitted the Roclatan™ NDA in May 2018 and, in July 2018, the FDA set the PDUFA goal date for the completion of the FDA s review of the Roclatan™ NDA for March 14, 2019. We continue to focus on global expansion and the development of additional product candidates and technologies in ophthalmology, including for wet age-related macular degeneration and diabetic macular edema.

### The Convertible Notes Exchange

In September 2014, we issued and sold to the Selling Stockholders $125.0 million in aggregate principal amount of the Convertible Notes, pursuant to a Note Purchase Agreement, dated as of September 8, 2014 (as amended, the Note Purchase Agreement ), which Convertible Notes were convertible at any time and from time to time at the option of the Selling Stockholders into shares of our common stock, upon the terms and subject to the conditions and limitations set forth therein.

Pursuant to the Exchange and Termination Agreement, dated as of July 23, 2018, among us and the Selling Stockholders (the Exchange and Termination Agreement ) (i) the Selling Stockholders converted the entire outstanding principal amount of the Convertible Notes into 5,040,323 shares of our common stock (the Conversion Shares ) in accordance with the terms of the Convertible Notes and (ii) we paid accrued and unpaid interest on the Convertible Notes to July 23, 2018.

In addition, as mutually agreed to with the Selling Stockholders in order to complete the conversion of the Convertible Notes, pursuant to the Exchange and Termination Agreement, we issued an additional 329,124 shares of our common stock (the Additional Shares and, together with the Conversion Shares, the Exchange Shares ) to the Selling Stockholders. The issuance of the Additional Shares and the issuance of the Conversion Shares were effected simultaneously, as part of a single transaction pursuant to the Exchange and Termination Agreement. No underwriters were involved with the issuance of the Additional Shares or the issuance of the Conversion Shares. We issued the Conversion Shares and the Additional Shares to the Selling Stockholders in reliance on the exemptions from registration provided by Section 3(a)(9) and Section 4(a)(2) of the Securities Act, respectively. We relied on these exemptions from registration based in part on the nature of the transactions and the various representations made by the Selling Stockholders.

In connection with the Exchange and Termination Agreement, we and the Selling Stockholders entered into the Registration Rights Agreement. Pursuant to the Registration Rights Agreement, we agreed to register the Additional Shares for resale from time to time. This prospectus supplement relates to the resale from time to time by the Selling Stockholders of the Additional Shares. See Plan of Distribution.

Table of Contents

## Corporate Information

Our principal executive offices are located at 4301 Emperor Boulevard, Suite 400 Durham, North Carolina 27703, and our telephone number is (919) 237-5300. We also have offices in Bedminster, New Jersey, Irvine, California and Dublin, Ireland. We were incorporated in Delaware in June 2005. Our internet address is http://www.aeriepharma.com and more information about Rhopressa®, including the full product label, is available at http://www.rhopressa.com. The information found on our websites is not incorporated by reference into this prospectus supplement.

Table of Contents

## RISK FACTORS

You should consider carefully the risks discussed under the section captioned Risk Factors contained in our Annual Report on Form 10-K for the year ended December 31, 2017 and our Quarterly Report on Form 10-Q for the quarterly periods ended March 31, 2018 and June 30, 2018, each of which is incorporated by reference in this prospectus supplement, together with other information in this prospectus supplement, and the information and documents incorporated by reference in this prospectus supplement, before you make a decision to invest in our common stock. The risks and uncertainties described therein are not the only ones we face. Other risks and uncertainties, including those that we do not currently consider material, may impair our business. If any of these risks actually occur, our business, financial condition, operating results or cash flows could be materially adversely affected. This could cause the trading price of our common stock to decline.

Table of Contents

## USE OF PROCEEDS

We will not receive any proceeds from any sale of any shares of common stock covered by this prospectus supplement. The Selling Stockholders will receive all of the net proceeds from any sale of shares of common stock covered by this prospectus supplement. We will, however, bear certain costs associated with any sale of shares of common stock covered by this prospectus supplement, other than any discounts, concessions and commissions payable to broker-dealers or agents, which will be borne by the Selling Stockholders. See Plan of Distribution.

Table of Contents

## SELLING STOCKHOLDERS

We are registering the resale from time to time by the Selling Stockholders of 329,124 shares of our common stock pursuant to the Registration Rights Agreement. Deerfield Private Design, Deerfield Partners and Deerfield Special Situations acquired 236,969, 65,825 and 26,330 shares of common stock, respectively, in a private placement that occurred concurrently with the conversion of their Convertible Notes. See Summary The Convertible Notes Exchange.

The information in the table below is as of July 23, 2018, except as otherwise indicated. We have prepared the table below based on information supplied to us by or on behalf of the Selling Stockholders. The Selling Stockholders may have sold, transferred, otherwise disposed of or purchased, or may sell, transfer, otherwise dispose of or purchase, at any time and from time to time, shares of our common stock in transactions exempt from the registration requirements of the Securities Act or in the open market after the date on which they provided the information set forth in the table. In particular, the table below does not reflect any sales of shares of our common stock by the Selling Stockholders after July 23, 2018.

We do not know when or in what amounts the Selling Stockholders may actually offer the shares of common stock covered by this prospectus supplement for sale. The Selling Stockholders might not sell any or all of the shares of common stock covered by this prospectus supplement. Because the Selling Stockholders may offer for sale all or some of the shares of common stock covered by this prospectus supplement and/or otherwise dispose of or purchase shares of common stock from time to time, we cannot estimate the number of the shares of common stock that will be held by the Selling Stockholders after completion of any such sale. See Plan of Distribution. For the purposes of the table below, we assume that each Selling Stockholder will sell all of its shares of common stock covered by this prospectus supplement.

For information regarding material relationships and transactions between us and the Selling Stockholders, see Item 1.01 Entry into a Material Definitive Agreement of our Current Report on Form 8-K filed on July 23, 2018, which is incorporated by reference in this prospectus supplement.

| Name of Selling Stockholder (1)(2) | Number of Shares Beneficially Owned | Percentage of Shares Beneficially Owned (3) | Maximum Number of Shares that May be Offered Hereby | Number of Shares Beneficially Owned After the Sale of the Maximum Number of Shares Offered Hereby | Percentage of Shares Beneficially Owned After the Sale of the Maximum Number of Shares Offered Hereby (3) |
|---|---|---|---|---|---|
| Deerfield Private Design Fund III, L.P. (4) | 2,675,638 | 5.92% | 236,969 | 2,438,669 | 5.39% |
| Deerfield Partners, L.P. (5) | 1,027,056 | 2.27% | 65,825 | 961,231 | 2.13% |
| Deerfield Special Situations Fund, L.P. (6) | 188,357 | 0.42% | 26,330 | 162,027 | 0.36% |

(1) Additional information concerning the Selling Stockholders or pledgees, donees, transferees or other successors in interest of any such stockholder may be set forth in a prospectus supplement.

(2) The address for each Selling Stockholder is c/o Deerfield Management Company, L.P., 780 Third Avenue, 37th Floor, New York, NY 10017.

(3) Percentage ownership is based on 45,222,253 shares of the Company s common stock outstanding as of August 2, 2018.

(4) Deerfield Mgmt III, L.P. is the general partner of Deerfield Private Design Fund III, L.P. Deerfield Management Company, L.P. is the investment manager of Deerfield Private Design Fund III, L.P. Mr. James E. Flynn is the sole member of the general partner of each of Deerfield Mgmt III, L.P. and Deerfield Management Company, L.P. Deerfield Mgmt III, L.P., Deerfield Management Company, L.P. and Mr. James E. Flynn may be deemed to beneficially own the shares of common stock of the Company beneficially owned by Deerfield Private Design Fund III, L.P.

Table of Contents

(5) Deerfield Mgmt, L.P. is the general partner of Deerfield Partners, L.P. Deerfield Management Company, L.P. is the investment manager of Deerfield Partners, L.P. Mr. James E. Flynn is the sole member of the general partner of each of Deerfield Mgmt, L.P. and Deerfield Management Company, L.P. Deerfield Mgmt, L.P., Deerfield Management Company, L.P. and Mr. James E. Flynn may be deemed to beneficially own the shares of common stock of the Company beneficially owned by Deerfield Partners, L.P.

(6) Deerfield Mgmt, L.P. is the general partner of Deerfield Special Situations Fund, L.P. Deerfield Management Company, L.P. is the investment manager of Deerfield Special Situations Fund, L.P. Mr. James E. Flynn is the sole member of the general partner of each of Deerfield Mgmt, L.P. and Deerfield Management Company, L.P. Deerfield Mgmt, L.P., Deerfield Management Company, L.P. and Mr. James E. Flynn may be deemed to beneficially own the shares of common stock of the Company beneficially owned by Deerfield Special Situations Fund, L.P.

Table of Contents

## U.S. FEDERAL INCOME AND ESTATE TAX CONSIDERATIONS

The following is a summary of the material U.S. federal income and estate tax consequences of the ownership and disposition of our common stock registered pursuant to this prospectus supplement. This summary is limited to a non-U.S. holder (as defined below) that holds our common stock as a capital asset (generally, investment property). This summary does not discuss all of the aspects of U.S. federal income and estate taxation that may be relevant to a non-U.S. holder in light of the non-U.S. holder s particular investment or other circumstances. In addition, this summary also does not address any tax considerations arising under the laws of any U.S. state or local jurisdiction or non-U.S. jurisdiction or under the U.S. federal gift tax laws. Accordingly, all prospective non-U.S. holders should consult their own tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the ownership and disposition of our common stock.

This summary is based on provisions of the U.S. Internal Revenue Code of 1986, as amended, or the Code, applicable U.S. Treasury regulations and administrative and judicial interpretations, all as in effect or in existence on the date of this prospectus. Subsequent developments in U.S. federal income or estate tax law, including changes in law or differing interpretations, which may be applied retroactively, could alter the U.S. federal income and estate tax consequences of owning and disposing of our common stock as described in this summary. We cannot assure you that the U.S. Internal Revenue Service, or the IRS, will not challenge one or more of the tax consequences described in this summary, and we have not obtained, nor do we intend to obtain, any ruling from the IRS or opinion of counsel with respect to any of the tax consequences of the ownership or disposition of our common stock by a non-U.S. holder.

As used in this summary, the term non-U.S. holder means a beneficial owner of our common stock that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States or of any state thereof or the District of Columbia;
- an entity or arrangement treated as a partnership for U.S. federal income tax purposes;
- an estate whose income is includible 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 (within the meaning of the Code) has the authority to control all of the trust s substantial decisions, or (2) the trust has a valid election in effect under applicable U.S. Treasury regulations to be treated as a United States person.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner in the partnership generally will depend upon the status of the partner, the activities of the partnership and certain determinations made at the partner level. Partnerships, and partners in partnerships, that hold

our common stock should consult their own tax advisors as to the particular U.S. federal income and estate tax consequences of owning and disposing of our common stock that are applicable to them.

This summary does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address any special tax rules that may apply to particular non-U.S. holders, such as:

- financial institutions, insurance companies, tax-exempt organizations, pension plans, brokers, dealers or traders in stocks, securities or currencies, certain former citizens or long-term residents of the United States, controlled foreign corporations or passive foreign investment companies; or

- a non-U.S. holder holding our common stock as part of a conversion, constructive sale, wash sale or other integrated transaction or a hedge, straddle or synthetic security;

- a non-U.S. holder that holds or receives our common stock pursuant to the exercise of any employee stock option or otherwise as compensation; or

Table of Contents

a non-U.S. holder that at any time owns, directly, indirectly or constructively, 5% or more of our capital stock.

***Each non-U.S. holder should consult a tax advisor regarding the U.S. federal, state, local and non-U.S. income and other tax consequences of owning and disposing of our common stock.***

**Dividends**

Distributions on our common stock generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder s investment, up to (and will reduce, but not below zero) such non-U.S. holder s tax basis in the common stock. Any remaining excess will be treated as capital gain that will be subject to the tax treatment described below in Gain on Disposition of Our Common Stock.

As discussed above in the section titled Risk Factors, we do not intend to pay cash dividends on our common stock for the foreseeable future. In the event that we do make cash distributions on our common stock, the gross amounts paid to a non-U.S. holder that are treated as dividends not effectively connected with such non-U.S. holder s conduct of a trade or business in the United States will be subject to withholding of U.S. federal income tax at a rate of 30%, or a lower rate under an applicable income tax treaty. In order to claim the benefit of an applicable income tax treaty, a non-U.S. holder will be required to provide to the applicable withholding agent a properly executed IRS Form W-8BEN or W-8BEN-E (or other applicable form) in accordance with the applicable certification and disclosure requirements. Special rules apply to partnerships and other pass-through entities, and these certification and disclosure requirements also may apply to beneficial owners of partnerships and other pass-through entities that hold our common stock.

Dividends paid on our common stock that are effectively connected with a non-U.S. holder s conduct of a trade or business in the United States and, if required by an applicable income tax treaty, that are attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States, will be taxed on a net income basis at the regular graduated rates and in the manner applicable to United States persons. In that case, withholding of U.S. federal income tax discussed above will not apply if the non-U.S. holder provides to the applicable withholding agent a properly executed IRS Form W-8ECI (or successor form) in accordance with the applicable certification and disclosure requirements. In addition, a non-U.S. holder that is treated as a corporation for U.S. federal income tax purposes may be subject to a branch profits tax at a 30% rate, or a lower rate under an applicable income tax treaty, on the non-U.S. holder s earnings and profits (attributable to dividends on our common stock or otherwise) that are effectively connected with the non-U.S. holder s conduct of a trade or business within the United States, subject to adjustments.

The certifications described above must be provided to the applicable withholding agent prior to the payment of dividends and must be updated periodically. A non-U.S. holder may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for a refund with the U.S. Internal Revenue Service. Non-U.S. holders should consult their own tax advisors regarding their entitlement to benefits under a relevant income tax treaty and the manner of claiming the benefits.

The foregoing is subject to the discussions below under U.S. Information Reporting and Backup Withholding and FATCA Withholding.

**Gain on Disposition of Our Common Stock**

A non-U.S. holder generally will not be subject to U.S. federal income tax (including withholding thereof) on any gain recognized on a sale or other taxable disposition of our common stock unless:

Table of Contents

the gain is effectively connected with the non-U.S. holder s conduct 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 the non-U.S. holder in the United States; in this case, the gain will be subject to U.S. federal income tax on a net income basis at the regular graduated rates and in the manner applicable to United States persons (unless an applicable income tax treaty provides otherwise) and, if the non-U.S. holder is treated as a corporation for U.S. federal income tax purposes, the branch profits tax described above may also apply;

the non-U.S. holder is an individual who is present in the United States for a period aggregating more than 182 days in the taxable year of the disposition and meets other requirements (in which case, except as otherwise provided by an applicable income tax treaty, the gain, which may be offset by certain U.S. source capital losses, generally will be subject to a flat 30% U.S. federal income tax, even though the non-U.S. holder is not considered a resident alien under the Code); or

we are or have been a U.S. real property holding corporation for U.S. federal income tax purposes at any time during the shorter of the five-year period ending on the date of disposition or the period that the non-U.S. holder held our common stock.

Generally, a corporation is a U.S. real property holding corporation if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests (including U.S. real property interests ) plus its other assets used or held for use in a trade or business. The tax relating to stock in a U.S. real property holding corporation generally will not apply to a non-U.S. holder whose holdings, direct, indirect and constructive, at all times during the applicable period, constituted 5% or less of our common stock, provided that our common stock was regularly traded on an established securities market. We believe that we are not currently, and we do not anticipate becoming in the future, a U.S. real property holding corporation. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above. Non-U.S. holders should consult their own tax advisors regarding the possible adverse U.S. federal income tax consequences to them if we are, or were to become, a U.S. real property holding corporation.

The foregoing is subject to the discussions below under U.S. Information Reporting and Backup Withholding and FATCA Withholding.

**Federal Estate Tax**

Our common stock that is owned or treated as owned by an individual who is not a U.S. citizen or resident of the United States (as specially defined for U.S. federal estate tax purposes) at the time of death will be included in the individual s gross estate for U.S. federal estate tax purposes, unless an applicable estate tax or other treaty provides otherwise and, therefore, may be subject to U.S. federal estate tax.

**U.S. Information Reporting and Backup Withholding**

The applicable withholding agent with respect to a non-U.S. holder generally will be required to report to the IRS and to such non-U.S. holder payments of dividends on our common stock and the amount of U.S. federal income tax, if any, withheld with respect to those payments. Copies of the information returns reporting such dividends and any withholding may also be made available to the tax authorities in the country in which the non-U.S. holder resides under the provisions of a treaty or agreement. A non-U.S. holder will be exempt from backup withholding on dividends paid on our common stock if the non-U.S. holder provides to the applicable withholding agent a properly

executed IRS Form W-8BEN or W-8BEN-E (or other applicable form) certifying under penalties of perjury that the non-U.S. holder is not a United States person, or otherwise meets documentary evidence requirements for establishing that it is not a United States person or otherwise qualifies for an exemption.

The gross proceeds from the disposition of our common stock may be subject to U.S. information reporting and backup withholding. If a non-U.S. holder sells our common stock outside the United States through a non-U.S. office of a non-U.S. broker and the sales proceeds are paid to the non-U.S. holder outside the United States, then the U.S. backup withholding and information reporting requirements generally will not apply to that payment. However, U.S. information reporting, but not U.S. backup withholding, will apply to a payment of sales proceeds, even if that

Table of Contents

payment is made outside the United States, if a non-U.S. holder sells our common stock through a non-U.S. office of a broker that is a United States person or has certain enumerated connections with the United States, unless the broker has documentary evidence in its files that the non-U.S. holder is not a United States person and certain other conditions are met or the non-U.S. holder otherwise qualifies for an exemption.

If a non-U.S. holder receives payments of the proceeds of a sale of our common stock to or through a U.S. office of a broker, the payment is subject to both U.S. backup withholding and information reporting unless the non-U.S. holder provides to the broker a properly executed IRS Form W-8BEN or W-8BEN-E (or other applicable form) certifying under penalties of perjury that the non-U.S. holder is not a United States person or the non-U.S. holder otherwise qualifies for an exemption.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund to a non-U.S. holder, or a credit against a non-U.S. holder s U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

**FATCA Withholding**

The Foreign Account Tax Compliance Act and related Treasury guidance (commonly referred to as FATCA ) impose U.S. federal withholding tax at a rate of 30% on payments to certain foreign entities of (i) U.S.-source dividends (including dividends paid on our common stock) and (ii) the gross proceeds from the sale or other disposition after December 31, 2018 of property that produces U.S.-source dividends (including sales or other dispositions of our common stock). This withholding tax applies to a foreign entity, whether acting as a beneficial owner or an intermediary, unless such foreign entity complies with (i) certain information reporting requirements regarding its U.S. account holders and its U.S. owners and (ii) certain withholding obligations regarding certain payments to its account holders and certain other persons. Accordingly, the entity through which a non-U.S. holder holds its common stock will affect the determination of whether such withholding is required. Non-U.S. holders are encouraged to consult their tax advisors regarding FATCA.

Table of Contents

## PLAN OF DISTRIBUTION

We are registering 329,124 shares of common stock owned by the Selling Stockholders to permit the resale of these shares of common stock by the Selling Stockholders, their donees, pledgees, transferees or other successors in interests from time to time after the date of this prospectus supplement. We will not receive any proceeds from any sale of any shares of common stock covered by this prospectus supplement. In accordance with the Registration Rights Agreement, we are required to pay all reasonable expenses, other than any discounts, concessions and commissions payable to broker-dealers or agents, incurred in connection with our obligation to register these shares of common stock. In addition, we are required to reimburse the Selling Stockholders for certain expenses incurred by them in connection with the registration of these shares of common stock in the aggregate amount of up to $25,000.

The shares of common stock covered by this prospectus supplement may be sold in one or more transactions at fixed prices or prices subject to change, at prevailing market prices at the time of the sale, at varying prices related to the market price determined at the time of sale or at negotiated prices. These sales may be effected pursuant to one or more of the following methods:

- in transactions on The Nasdaq Global Market or any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in transactions in the over-the-counter market;
- in ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- in block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- through purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- in an exchange distribution in accordance with the rules of the applicable exchange;
- in privately negotiated transactions;
- through the writing or settlement of standardized or over-the-counter options or other hedging or derivative transactions, whether through an options exchange or otherwise;
- by pledge to secure debts and other obligations;

in other ways not involving market makers or established trading markets, including direct sales to purchasers or sales effected through agents;

a combination of any such methods of sale; and

any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell the shares of common stock covered by this prospectus supplement under Rule 144 promulgated under the Securities Act, if available, rather than under this prospectus supplement. In addition, the Selling Stockholders may transfer the shares of common stock by other means not described in this prospectus supplement, including by gift.

The Selling Stockholders may sell the shares of common stock covered by this prospectus supplement directly to purchasers. In this case, the Selling Stockholders may not engage broker-dealers or agents in the offer and sale of such shares. If the Selling Stockholders sell the shares of common stock covered by this prospectus supplement to or through broker-dealers or agents, such broker-dealers or agents may receive compensation in the form of discounts, concessions or commissions from the Selling Stockholders or commissions from purchasers of such shares for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular broker-dealers or agents may be in excess of those customary in the types of transactions involved).

Table of Contents

In connection with sales of the shares of common stock covered by this prospectus supplement or otherwise, the Selling Stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of such shares in the course of hedging in positions they assume. The Selling Stockholders may also sell shares of our common stock short and deliver shares of common stock covered by this prospectus supplement to close out short positions and to return borrowed shares in connection with such short sales. The Selling Stockholders may also loan or pledge shares of common stock to broker-dealers that in turn may sell such shares. The Selling Stockholders may also pledge, hypothecate or grant a security interest in some or all of the shares of our common stock owned by it. The pledgees, secured parties or persons to whom the shares have been hypothecated may, upon foreclosure, be deemed to be Selling Stockholders. The Selling Stockholders may also transfer the shares of common stock in other circumstances, in which case the transferees or other successors in interest will be the selling beneficial owners for purposes of this prospectus supplement.

We are not aware of any plans, arrangements or understandings between any Selling Stockholder and any broker-dealer or agent regarding the sale of our shares of common stock by any Selling Stockholder. There can be no assurance that the Selling Stockholders will sell any or all of the shares of our common stock covered by this prospectus supplement.

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

We have agreed with the Selling Stockholders to keep one or more registration statements effective until the earlier of (1) such time as all of the shares covered by this prospectus supplement have been disposed of or (2) the date on which all of such shares may be sold without limitation, restriction or condition (including any current public information requirement) pursuant to Rule 144 under the Securities Act.

Table of Contents

## LEGAL MATTERS

The legal validity of the common stock offered by this prospectus supplement will be passed upon for us by Fried, Frank, Harris, Shriver & Jacobson LLP, New York, New York.

Table of Contents

## EXPERTS

The financial statements and management s assessment of the effectiveness of internal control over financial reporting (which is included in Management s Report on Internal Control over Financial Reporting) incorporated in this prospectus supplement by reference to the Annual Report on Form 10-K for the year ended December 31, 2017 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

Table of Contents

## INFORMATION INCORPORATED BY REFERENCE

The SEC s rules allow us to incorporate by reference information into this prospectus supplement, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus supplement, and information that we file with the SEC will automatically update and supersede the previously filed information. In the case of a conflict or inconsistency between information in this prospectus supplement and/or information incorporated by reference into this prospectus supplement, you should rely on the information contained in the document that was filed later.

We incorporate by reference our filings listed below and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, other than any portions of the respective filings that were furnished, pursuant to Item 2.02 or Item 7.01 of Current Reports on Form 8-K (including exhibits related thereto) or other applicable SEC rules, rather than filed, prior to the termination of the offering under this prospectus supplement:

- our Annual Report on Form 10-K for the year ended December 31, 2017, which was filed with the SEC on March 1, 2018;
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2017 from our Definitive Proxy Statement on Schedule 14A, which was filed with the SEC on April 27, 2018;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2018 and June 30, 2018, which were filed with the SEC on May 9, 2018 and August 9, 2018 respectively;
- our Current Reports on Form 8-K, filed with the SEC on January 23, 2018 (Item 8.01 only), January 26, 2018, June 8, 2018 and July 23, 2018 (other than Item 7.01); and
- the description of our common stock contained in our Registration Statement on Form 8-A, which was filed with the SEC on October 25, 2013, as supplemented by the Description of Capital Stock section included in the accompanying prospectus, including any amendments or reports filed for the purpose of updating the description.

You may obtain copies of any of these filings by contacting us at the address and telephone number indicated below or by contacting the SEC as described below under the section entitled Where You Can Find More Information. Documents incorporated by reference are available from us without charge, excluding all exhibits unless an exhibit has been specifically incorporated by reference into this prospectus supplement, by requesting them in writing or by telephone or at our website at:

Aerie Pharmaceuticals, Inc.

Attention: Investor Relations

2030 Main Street, Suite 1500

Irvine, California 92614

(949) 526-8700

www.aeriepharma.com

Table of Contents

## WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the common stock offered hereby. As permitted by SEC rules, this prospectus supplement does not contain all of the information we have included in the registration statement and the accompanying exhibits. You may refer to the registration statement and the exhibits for more information about us and our securities. The registration statement and the exhibits are available at the SEC s Public Reference Room or through its website as described below.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read and copy any materials we file with the SEC at its Public Reference Room at 100 F Street N.E., Washington DC, 20549. You can obtain information about the operations of the SEC Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website that contains information we file electronically with the SEC, which you can access over the Internet at http://www.sec.gov. General information about us, including our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports, is available free of charge through our website at http://www.aeriepharma.com as soon as reasonably practicable after we electronically file them with, or furnish them to, the SEC. Information on our website is not incorporated into this prospectus supplement or our other securities filings and is not a part of these filings.

Table of Contents

**PROSPECTUS**

**Common Stock**

We may offer and sell from time to time, in one or more offerings, shares of our common stock.

The common stock may be offered or sold by us at fixed prices, at prevailing market prices at the time of sale or at prices negotiated with purchasers, to or through underwriters, broker-dealers, agents, or through any other means described in this prospectus under Plan of Distribution and in supplements to this prospectus in connection with a particular offering of common stock.

This prospectus describes the general manner in which common stock may be offered and sold by us. When we sell common stock under this prospectus, we will, if necessary and required by law, provide a prospectus supplement that will contain specific information about the terms of that offering. Any prospectus supplement may also add to, update, modify or replace information contained in this prospectus. We urge you to read carefully this prospectus, any accompanying prospectus supplement and any documents we incorporate by reference into this prospectus and any accompanying prospectus supplement before you make your investment decision.

Our common stock is listed on the Nasdaq Global Market under the symbol AERI. As of September 14, 2016, the closing price of our common stock was $21.13 per share.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012, and are subject to reduced public company reporting requirements.

**Investing in our common stock involves risks. You should carefully consider all of the information set forth in this prospectus, including the risk factors set forth under Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2015 filed with the Securities and Exchange Commission on March 2, 2016 (which document is incorporated by reference herein), as well as the risk factors and other information contained in any accompanying prospectus supplement and any related free writing prospectus and any documents we incorporate by reference into this prospectus and any accompanying prospectus supplement, before deciding to invest in our common stock. See Incorporation of Certain Information By Reference.**

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

**The date of this prospectus is September 15, 2016.**

Table of Contents

## TABLE OF CONTENTS

Table of Contents

## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the SEC ) using the SEC s shelf registration rules. Pursuant to this prospectus, we may, from time to time, sell shares of our common stock in one or more offerings.

When we sell common stock under this prospectus, we will, if necessary and required by law, provide a prospectus supplement that will contain specific information about the terms of that offering. That prospectus supplement may include a discussion of any risk factors or other special considerations that apply to that offering. Any prospectus supplement may also add to, update, modify or replace information contained in this prospectus. If there is any inconsistency between the information in this prospectus and any prospectus supplement, you should rely on the information in that prospectus supplement. You should carefully read both this prospectus and any prospectus supplement together with the additional information described under the heading Incorporation of Certain Information by Reference.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is hereby made to the actual documents for complete information. All of the summaries are qualified in their entirety by reference to the actual documents. Copies of some of the documents referred to herein have been filed or will be filed or incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below in the section entitled Where You Can Find More Information.

You should rely only on the information provided in this prospectus, including information incorporated by reference as described above, or any prospectus supplement or free writing prospectus that we have specifically referred you to. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We will not make an offer to sell securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information in this prospectus, any accompanying prospectus supplement or any documents we incorporate by reference into this prospectus and any prospectus supplement is accurate as of any date other than the date on the front of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

References in this prospectus to the Company, Aerie, we, us and our and similar terms refer to Aerie Pharmaceu Inc. and its consolidated subsidiaries.

Table of Contents

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain 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 ). We may, in some cases, use terms such as predicts, believes, potential, proposed, estimates, anticipates, expects, plans, intends, may, would, could, other words that convey uncertainty of future events or outcomes to identify these forward-looking statements.

Forward-looking statements appear in a number of places throughout this prospectus and the documents incorporated by reference herein, and include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things:

- the success, timing and cost of our ongoing and anticipated preclinical studies and clinical trials for our current product candidates and potential future product candidates, including statements regarding the timing of initiation and completion of the studies and trials;
- our expectations regarding the clinical effectiveness of our product candidates and results of our clinical trials;
- the timing of and our ability to request, obtain and maintain U.S. Food and Drug Administration ( FDA ) or other regulatory authority approval of, or other action with respect to, our product candidates in the United States, Canada, Europe, Japan and elsewhere;
- our expectations related to the use of proceeds from our initial public offering ( IPO ) in October 2013, the issuance and sale of our privately placed senior secured convertible notes in September 2014 (the 2014 Convertible Notes ) and the issuance and sale of common stock under our shelf registration statement on Form S-3 and at-the-market sales agreements;
- our estimates regarding anticipated capital requirements and our needs for additional financing;
- the commercial launch and potential future sales of our current or any other future product candidates;
- our commercialization, marketing and manufacturing capabilities and strategy;
- third-party payor coverage and reimbursement for our product candidates;
- the glaucoma patient market size and the rate and degree of market adoption of our product candidates by eye-care professionals and patients;

the timing, cost or other aspects of the commercial launch of our product candidates;

our plans to pursue development of our product candidates for additional indications and other therapeutic opportunities;

the potential advantages of our product candidates;

our plans to explore possible uses of our existing proprietary compounds beyond glaucoma;

our ability to protect our proprietary technology and enforce our intellectual property rights;

our expectations regarding collaborations, licensing, acquisitions and strategic operations, including our ability to in-license or acquire additional ophthalmic products or product candidates; and

our stated objective of building a major ophthalmic pharmaceutical company.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events, competitive dynamics and industry change, and depend on regulatory approvals and economic and other environmental circumstances that may or may not occur in the future or may occur on longer or shorter timelines than anticipated. We discuss many of these risks in greater detail under the heading Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2015, as filed with the SEC on March 2, 2016. You should not rely upon forward-looking statements as predictions of future events.

Table of Contents

Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus and the documents incorporated by reference herein, we caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from the forward-looking statements contained in this prospectus and the documents incorporated by reference herein. In addition, even if our results of operations, financial condition and liquidity, and events in the industry in which we operate are consistent with the forward-looking statements contained in this prospectus and the documents incorporated by reference herein, they may not be predictive of results or developments in future periods. Any forward-looking statements that we make in this prospectus are as of the date of this prospectus. Except as required by law, we are under no duty to update or revise any of the forward-looking statements, whether as a result of new information, future events or otherwise, after the date of this prospectus.

Table of Contents

## THE COMPANY

We are a clinical-stage pharmaceutical company focused on the discovery, development and commercialization of first-in-class therapies for the treatment of patients with glaucoma and other diseases of the eye. Our strategy is to advance our product candidates, including Rhopressa (netarsudil ophthalmic solution) 0.02% and Roclatan (netarsudil/latanoprost ophthalmic solution) 0.02%/0.005%, to regulatory approval, and commercialize these products ourselves in North American markets. We plan to build a commercial team of approximately 100 sales representatives to target approximately 10,000 high prescribing eye-care professionals throughout the United States. We are directing our own clinical trials to gain regulatory approval in Europe, and are preparing to either use a contract research organization, or otherwise partner, to conduct the necessary trials to gain approval in Japan. For commercialization outside of North America, we expect to explore partnership opportunities through collaboration and licensing arrangements in Europe and Japan and may potentially commercialize ourselves in Europe. We are also enhancing our longer-term commercial potential by identifying and advancing additional product candidates, including through our internal discovery efforts, research collaborations, potential in-licensing or acquisitions of additional ophthalmic products or technologies or product candidates that would complement our current product portfolio.

We completed our initial public offering in October 2013 and raised net proceeds of approximately $68 million. Since our IPO, we have raised additional net proceeds of approximately $124 million, through the sale and issuance of our 2014 Convertible Notes in September 2014, and approximately $98 million, through at-the-market sales during 2015 and 2016 (through August 31, 2016). Our senior leadership team has extensive experience in the ophthalmology market and has overseen the development and commercialization at major pharmaceutical companies of several successful ophthalmic products. If our products are approved and we are commercially successful, we believe Aerie could become a market-leading ophthalmic pharmaceutical company.

Our lead product candidate, Rhopressa™, is a novel once-daily eye drop designed to lower intraocular pressure ( IOP ), in patients with glaucoma or ocular hypertension. We announced our submission of a new drug application ( NDA ), with the U.S. Food and Drug Administration ( FDA ) for Rhopressa™ on September 6, 2016. We are developing Rhopressa as the first of a new class of compounds that is designed to lower IOP in patients through novel mechanisms of action, or MOAs. We believe that, if approved, Rhopressa will represent the first new MOAs for lowering IOP in patients with glaucoma in over 20 years. Based on clinical data to date, we expect that if Rhopressa is approved, it will compete with non-PGA (prostaglandin analog) products as a preferred adjunctive therapy to PGAs, due to its strong and consistent IOP-lowering effect with once-daily dosing relative to currently marketed non-PGA products and potential synergistic effect with PGA products. Adjunctive therapies currently represent approximately one-half of the entire glaucoma therapy market in the United States. In addition, if approved, we believe that Rhopressa may also become a preferred therapy where PGAs are contraindicated, for patients who do not respond to PGAs, for patients who have lower IOPs but nevertheless present with glaucomatous damage to the optic nerve, which is commonly referred to as low-tension glaucoma, as well as for patients who choose to avoid the cosmetic issues associated with PGAs.

Our second product candidate, Roclatan , which is a fixed-dose combination of Rhopressa and latanoprost, the most commonly prescribed drug for the treatment of patients with glaucoma, successfully completed a Phase 2b clinical trial in patients with open-angle glaucoma and ocular hypertension in June 2014. The first Phase 3 registration trial for Roclatan , named Mercury 1, commenced in September 2015 and on September 14, 2016 we announced that Mercury 1 achieved its primary efficacy endpoint of demonstrating superiority of Roclatan to each of its components. We commenced an additional Phase 3 trial in the United States for Roclatan , named Mercury 2, in March 2016. We believe Roclatan has the potential to provide a greater IOP-lowering effect than any currently approved glaucoma product. Therefore, we believe that if Roclatan is approved, it could compete with both PGA and non-PGA therapies and become the product of choice for patients requiring maximal IOP lowering, including those with higher IOPs and

those who present with significant disease progression.

Table of Contents

We own the worldwide rights to all indications for our current product candidates. Our intellectual property portfolio contains patents and pending patent applications related to composition of matter, pharmaceutical compositions and methods of use for our product candidates. We have patent protection for our primary product candidates, Rhopressa and Roclatan , in the United States through at least 2030.

Our principal executive offices are located at 2030 Main Street, Suite 1500, Irvine, California 92614, and our telephone number is (949) 526-8700. We also have offices in Bedminster, New Jersey and Durham, North Carolina. We were incorporated in Delaware in June 2005. Our internet address is http://www.aeriepharma.com. The information found on our website is not incorporated by reference into this prospectus.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012. We will remain an emerging growth company until the earlier of December 31, 2018 or such time when we have more than $1 billion in annual revenue, we issue more than $1 billion of non-convertible debt over a three-year period, or we have more than $700 million in market value of our stock held by non-affiliates as of the end of the second quarter of that fiscal year.

Table of Contents

## RISK FACTORS

You should consider carefully the risks set forth under Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on March 2, 2016 (which document is incorporated by reference herein), as well as other risk factors described under the caption Risk Factors in any accompanying prospectus supplement and any documents we incorporate by reference into this prospectus, including all future filings we make with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, before deciding to invest in our common stock. See Incorporation By Reference. See also the information contained under the heading Special Note Regarding Forward-Looking Statements above.

Table of Contents

## USE OF PROCEEDS

Unless otherwise indicated in an accompanying prospectus supplement, the net proceeds from the sale of our common stock offered pursuant to this prospectus will be used for general corporate purposes and working capital requirements. We may also use a portion of the net proceeds for the licensing or acquisition of, or the development of, additional product candidates and/or to fund possible investments in and the acquisition of complementary businesses or partnerships. However, we have no present plans, agreements or commitments with respect to any potential acquisition, investment or license.

The expected use of the net proceeds from the sale of our common stock offered pursuant to this prospectus represents our intentions based upon our current plans and business conditions. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our clinical trials and development efforts, as well as any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering. Pending our use of the net proceeds from the sale of our common stock offered pursuant to this prospectus, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities.

Table of Contents

## DILUTION

To the extent required by the Securities Act and the rules promulgated thereunder, we will set forth in a prospectus supplement the following information regarding any material dilution of the equity interests of investors purchasing securities in an offering under this prospectus:

- the net tangible book value per share of our equity securities before and after the offering;
- the amount of the increase in such net tangible book value per share attributable to the cash payments made by purchasers in the offering; and
- the amount of the immediate dilution from the public offering price which will be absorbed by such purchasers.

Table of Contents

## DESCRIPTION OF CAPITAL STOCK

The following describes the capital stock that we may offer under this prospectus, including the material provisions of our amended and restated certificate of incorporation, our amended and restated bylaws and certain provisions of the Delaware General Corporation Law (the DGCL ). Because the following is only a summary, it does not contain all of the information that may be important to you. For a complete description, you should refer to our amended and restated certificate of incorporation and amended and restated bylaws, copies of which have been filed with the SEC. See Incorporation of Certain Information by Reference and Where You Can Find More Information.

### General

Our amended and restated certificate of incorporation authorizes us to issue up to 150,000,000 shares of common stock, par value $0.001 per share, and 15,000,000 shares of preferred stock, par value $0.001 per share. As of June 30, 2016, we had issued and outstanding 26,649,605 shares of common stock and no shares of preferred stock.

In addition, as of June 30, 2016, we had outstanding 184,633 shares of restricted stock, options to purchase 5,271,279 shares of common stock and warrants to purchase 380,982 shares of common stock.

As of June 30, 2016 we had 8 stockholders of record. The actual number of stockholders is greater than this number of record holders, and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

### Common Stock

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. An election of directors by our stockholders shall be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Holders of common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of outstanding preferred stock.

In the event of our liquidation or dissolution, the holders of common stock are entitled to receive proportionately all assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock. Holders of common stock have no preemptive, subscription, redemption or conversion rights. All outstanding shares of our common stock are fully paid and non-assessable. The rights, preferences and privileges of 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 and issue in the future.

### Preferred Stock

Under the terms of our amended and restated certificate of incorporation, our board of directors is authorized to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock. We have no current

intention to issue any shares of preferred stock.

Table of Contents

**Stock Options**

As of June 30, 2016, options to purchase 5,271,279 shares of our common stock at a weighted average exercise price of $11.04 per share were outstanding, of which options to purchase 2,760,266 shares of our common stock were exercisable, at a weighted average exercise price of $9.48 per share.

**Warrants**

As of June 30, 2016, the following warrants were outstanding:

| Number of Underlying Shares | Exercise Price Per Share | Warrant Expiration Date | Type of Equity Security |
|---|---|---|---|
| 75,000 | $ 5.00 | February 2019 | Common Stock |
| 75,000 | $ 5.00 | November 2019 | Common Stock |
| 7,500 | $ 5.00 | August 2019 | Common Stock |
| 223,482 | $ 0.05 | December 2020 | Common Stock |

**Anti-Takeover Provisions**

Delaware law, our amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors.

***Staggered Board; Removal of Directors***

Our amended and restated certificate of incorporation and our amended and restated bylaws divide our board of directors into three classes with staggered three-year terms. In addition, a director may be removed only for cause. Any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office. Furthermore, our amended and restated certificate of incorporation provides that the authorized number of directors may be changed only by the resolution of our board of directors. The classification of our board of directors and the limitations on the removal of directors, change to the authorized numbers of directors and filling of vacancies could make it more difficult for a third party to acquire, or discourage a third party from seeking to acquire, control of our company.

***Stockholder Action by Written Consent; Special Meetings***

Our amended and restated certificate of incorporation provides that our stockholders may not act by written consent. Our amended and restated certificate of incorporation and our amended and restated bylaws also provide that, except as otherwise required by law, special meetings of our stockholders can only be called by our chairman of the board, our chief executive officer or our board of directors.

***Advance Notice Requirements for Stockholder Proposals***

Our amended and restated bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of persons for election to our board of directors. Stockholders at an annual meeting will only be able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a stockholder of record on the record date for the meeting who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder s intention to bring such business before the meeting. These provisions could have the effect of delaying until the next stockholder meeting stockholder actions that are favored by the holders of a majority of our outstanding voting securities.

Table of Contents

***Section 203 of the Delaware General Corporation Law***

We are subject to Section 203 of the DGCL, which prohibits a Delaware corporation from engaging in a business combination with any interested stockholder for a period of three years following the date the person became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested holder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (a) by persons who are directors and also officers and (b) pursuant to employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an interested stockholder as an entity or person who, together with the entity s or person s affiliates and associates, beneficially owns, or is an affiliate of the corporation and within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the

corporation.

***Amendments to Our Bylaws***

The DGCL provides generally that the affirmative vote of a majority of the shares presents at any meeting and entitled to vote on a matter is required to amend a corporation s bylaws, unless a corporation s bylaws requires a greater percentage. Our amended and restated bylaws may be amended or repealed by a vote of the majority of the directors present at any regular or special meeting of our board of directors at which a quorum is present or by the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in any annual election of directors.

***Corporate Opportunities***

To address situations in which officers or directors may have conflicting duties to different corporations, Section 122(17) of the DGCL allows a corporation to renounce, in its certificate of incorporation or by action of its board of directors, any interest or expectancy of the corporation in specified classes or categories of business opportunities. Our amended and restated certificate of incorporation renounces any interest or expectancy in, or

Table of Contents

in being offered an opportunity to participate in, any business opportunity that may be a corporate opportunity for any of ACP IV, L.P., Clarus Lifesciences II, L.P., Sofinnova Venture Partners VII, L.P. or TPG Funds, L.P. or any of their respective affiliates or any of their or their affiliates respective partners, members, directors, stockholders, employees or agents (whether or not any such person is our director), other than someone who is our employee. We do not renounce our interest in any corporate opportunity offered to any such person if such opportunity is offered to such person expressly and solely in his or her capacity as our director. By becoming a stockholder in our company, you will be deemed to have received notice of and consented to these provisions of our amended and restated certificate of incorporation.

***Limitation on Liability and Indemnification of Officers and Directors***

Our amended and restated certificate of incorporation limits the liability of directors to the fullest extent Delaware law permits. The effect of these provisions is to eliminate the rights of our Company and our stockholders, through stockholders derivative suits on behalf of our Company, to recover monetary damages against a director for breach of fiduciary duty as a director, including breaches resulting from grossly negligent behavior. However, our directors will be personally liable to us and our stockholders for any breach of the director s duty of loyalty, for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, under Section 174 of the DGCL or for any transaction from which the director derived an improper personal benefit. In addition, our amended and restated certificate of incorporation and bylaws provide that we will indemnify our directors and officers to the fullest extent Delaware law permits. We have entered into indemnification agreements with our current directors and officers. We also maintain directors and officers insurance.

***Listing on the Nasdaq Global Market***

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

***Transfer Agent and Registrar***

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

Table of Contents

## PLAN OF DISTRIBUTION

### General

We may sell the shares of our common stock covered by this prospectus from time to time using one or more of the following methods:

underwritten public offerings;

at-the-market sales to or through market makers or into an existing market for the securities;

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

privately negotiated transactions;

short sales (including short sales against the box );

through the writing or settlement of standardized or over-the-counter options or other hedging or derivative transactions, whether through an options exchange or otherwise;

by pledge to secure debts and other obligations;

in other ways not involving market makers or established trading markets, including direct sales to purchasers or sales effected through agents;

a combination of any such methods of sale; and

any other method permitted pursuant to applicable law.

To the extent required by law, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution. Any prospectus supplement relating to a particular offering of our common stock may

include the following information to the extent required by law:

- the terms of the offering;
- the names of any underwriters, dealers or agents participating in the offering;
- the purchase price of the securities sold by us to any underwriter or dealer and the net proceeds we expect to receive from the offering;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any delayed delivery arrangements;
- any agency fees or underwriting discounts and other items constituting agents or underwriters compensation;
- any public offering price;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

We may offer our common stock to the public through underwriting syndicates represented by managing underwriters or through underwriters without an underwriting syndicate. If underwriters are used for the sale of our common stock, the common stock will be acquired by the underwriters for their own account. The underwriters may resell the common stock in one or more transactions, including in negotiated transactions at a fixed public offering price or at varying prices determined at the time of sale. In connection with any such

Table of Contents

underwritten sale of our common stock, underwriters may receive compensation from us in the form of discounts, concessions or commissions. Underwriters may sell common stock to or through dealers, and the dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agents. Such compensation may be in excess of customary discounts, concessions or commissions. Underwriting compensation will not exceed 8% for any offering under this registration statement.

If we use an underwriter or underwriters to effectuate the sale of common stock, we will execute an underwriting agreement with those underwriters at the time of sale of those shares of common stock. To the extent required by law, the names of the underwriters will be set forth in the prospectus supplement used by the underwriters to sell those shares of common stock. Unless otherwise indicated in the prospectus supplement relating to a particular offering of common stock, the obligations of the underwriters to purchase our common stock will be subject to customary conditions precedent and the underwriters will be obligated to purchase all of the shares of our common stock offered if any of the shares of common stock are purchased.

In effecting sales, brokers or dealers engaged by us may arrange for other brokers or dealers to participate. Broker-dealers may receive discounts, concessions or commissions from us (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. Such compensation may be in excess of customary discounts, concessions or commissions. If dealers are utilized in the sale of securities, the names of the dealers and the terms of the transaction will be set forth in a prospectus supplement, if required.

We may also sell our common stock from time to time through agents. The applicable prospectus supplement will name any agent involved in the offer or sale of such common stock and will list commissions payable to these agents if required. These agents will be acting on a best efforts basis to solicit purchases for the period of their appointment, unless otherwise stated in any required prospectus supplement.

We may sell shares of our common stock directly to purchasers. In this case, we may not engage underwriters or agents in the offer and sale of such shares.

**Indemnification**

We may enter agreements under which underwriters, dealers and agents who participate in the distribution of our common stock may be entitled to indemnification by us against various liabilities, including liabilities under the Securities Act, and to contribution with respect to payments which the underwriters, dealers or agents may be required to make.

**Price Stabilization and Short Positions**

If underwriters or dealers are used in the sale, until the distribution of the securities is completed, rules of the SEC may limit the ability of any underwriters to bid for and purchase the securities. As an exception to these rules, representatives of any underwriters are permitted to engage in transactions that stabilize the price of the securities. These transactions may consist of bids or purchases for the purpose of pegging, fixing or maintaining the price of the securities. If the underwriters create a short position in the securities in connection with the offering (that is, if they sell more securities than are set forth on the cover page of the prospectus supplement) the representatives of the underwriters may reduce that short position by purchasing securities in the open market.

We make no representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, we make no representation that the representatives of

any underwriters will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Table of Contents

## LEGAL MATTERS

The legal validity of the common stock offered by this prospectus will be passed upon for us by Fried, Frank, Harris, Shriver & Jacobson LLP, New York, New York. Any underwriters will be advised about legal matters by their own counsel, which will be named in a prospectus supplement to the extent required by law.

Table of Contents

## EXPERTS

The financial statements incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2015 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

Table of Contents

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC s rules allow us to incorporate by reference information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, and information that we file with the SEC will automatically update and supersede the previously filed information. In the case of a conflict or inconsistency between information in this prospectus and/or information incorporated by reference into this prospectus, you should rely on the information contained in the document that was filed later.

We incorporate by reference our documents listed below and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, other than any portions of the respective filings that were furnished, pursuant to Item 2.02 or Item 7.01 of Current Reports on Form 8-K (including exhibits related thereto) or other applicable SEC rules, rather than filed, prior to the termination of the offering under this prospectus:

- our Annual Report on Form 10-K for the year ended December 31, 2015, which was filed with the SEC on March 2, 2016;
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2015 from our Definitive Proxy Statement on Schedule 14A, which was filed with the SEC on April 29, 2016;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2016 and June 30, 2016, which were filed with the SEC on May 3, 2016 and August 4, 2016, respectively;
- our Current Reports on Form 8-K, which were filed with the SEC on June 9, 2016, June 22, 2016 and September 15, 2016; and
- the description of our common stock contained in our Registration Statement on Form 8-A, which was filed with the SEC on October 25, 2013, including any amendments or reports filed for the purpose of updating the description.

You may obtain copies of any of these filings by contacting us at the address and telephone number indicated below or by contacting the SEC as described below under the section entitled Where You Can Find More Information. Documents incorporated by reference are available from us without charge, excluding all exhibits unless an exhibit has been specifically incorporated by reference into this prospectus, by requesting them in writing, by telephone or at our website at:

Aerie Pharmaceuticals, Inc.

Attention: Investor Relations

2030 Main Street, Suite 1500

Irvine, California 92614

(949) 526-8700

www.aeriepharma.com

Table of Contents

## WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the common stock offered hereby. This prospectus is part of a registration statement we have filed with the SEC. As permitted by SEC rules, this prospectus does not contain all of the information we have included in the registration statement and the accompanying exhibits. You may refer to the registration statement and the exhibits for more information about us and our common stock. The registration statement and the exhibits are available at the SEC s Public Reference Room or through its website as described below.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read and copy any materials we file with the SEC at its Public Reference Room at 100 F Street N.E., Washington DC, 20549. You can obtain information about the operations of the SEC Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website that contains information we file electronically with the SEC, which you can access over the Internet at http://www.sec.gov. General information about us, including our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports, is available free of charge through our website at http://www.aeriepharma.com as soon as reasonably practicable after we electronically file them with, or furnish them to, the SEC. Information on our website is not incorporated into this prospectus or our other securities filings and is not a part of these filings.

Table of Contents