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

FORM 10-Q

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

For the quarterly period ended March 31, 2021

or

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

For the transition period from _____ to _____

Commission File Number: 001-36152

Aerie Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**20-3109565**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**

4301 Emperor Boulevard, Suite 400
Durham, North Carolina 27703
(919) 237-5300
(Address of principal executive offices, zip code and telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.001 per share	AERI	Nasdaq Global Market

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes: ☒ No: ☐

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

As of April 29, 2021, there were 46,893,289 shares of the registrant's common stock, par value $0.001 per share, outstanding.

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Unless otherwise indicated or the context requires, the terms “Aerie,” “Company,” “we,” “us” and “our” refer to Aerie Pharmaceuticals, Inc. and its subsidiaries. References to “products” mean products approved by the U.S. Food and Drug Administration (“FDA”) or other regulatory authorities; references to “product candidates” mean products that are in development but not yet approved by the FDA or other regulatory authorities; and references to “future product candidates” mean products that have not yet been developed.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report contains 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,” “would,” “could,” “might,” “will,” “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 report and include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things:

- the broad impact of the coronavirus (“COVID-19”) pandemic on our business;
- the sales of Rhopressa® (netarsudil ophthalmic solution) 0.02% (“Rhopressa®”) or of Rocklatan® (netarsudil and latanoprost ophthalmic solution) 0.02%/0.005% (“Rocklatan®”), in the United States, and the potential future sales in the United States of any product candidates or future product candidates, if approved;
- the potential future sales in jurisdictions outside of the United States of Rhopressa®, named Rhokiinsa® (netarsudil ophthalmic solution) 0.02% (“Rhokiinsa®”) in Europe, or Rocklatan®, named Roclanda® (netarsudil and latanoprost ophthalmic solution) 0.02%/0.005% (“Roclanda®”) in Europe, or their equivalents, and those of any product candidates or future product candidates;
- our commercialization, marketing, manufacturing and supply management capabilities and strategies in and outside of the United States;
- third-party payer coverage and reimbursement for our products and product candidates and any future product candidates, if approved;
- the glaucoma patient market size and the rate and degree of market adoption of our products and product candidates and any future product candidates, if approved, by eye-care professionals and patients;
- the timing, cost or other aspects of the commercial launch of our products and product candidates and any future product candidates, if approved;
- the success, timing and cost of our ongoing and anticipated preclinical studies and clinical trials for our product candidates 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 our products, product candidates and any future product candidates and our expectations regarding the results of any clinical trials and preclinical studies;
- the timing of and our ability to request, obtain and maintain FDA or other regulatory authority approval of, or other action with respect to our products, product candidates and any future product candidates in the United States, Europe, Japan and elsewhere, including the expected timing of, and regulatory and/or other review of, filings for such products, product candidates and any future product candidates;
- our expectations related to the use of proceeds from our financing activities;
- 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 our products or product candidates for additional indications, and our preclinical retinal programs and other therapeutic opportunities;
- the potential advantages of our products, product candidates and any future product candidates;
- our ability to protect our proprietary technology and enforce our intellectual property rights; and
- our expectations regarding existing and future collaborations, licensing, acquisitions and strategic operations, including our ability to in-license or acquire additional ophthalmic products, product candidates or technologies.

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 Part I, Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2020, as filed with the Securities and Exchange Commission ("SEC") on February 26, 2021, and other documents we have filed or furnished with the SEC.

In particular, FDA approval of Rhopressa® and Rocklatan® do not constitute FDA approval of our product candidates or any future product candidates in the United States, and there can be no assurance that we will receive FDA approval for our product candidates or any future product candidates. In addition, the European Commission ("EC") grant of a Centralised Marketing Authorisation ("Centralised MA") for Rhokiinsa® and Roclanda® and the receipt of marketing authorization from the Medicines and Healthcare Products Regulatory Agency ("MHRA") for Roclanda® do not constitute European Medicines Agency ("EMA") or MHRA approval of our product candidates or any future product candidates in Europe, and there can be no assurance that we will receive EMA or MHRA approval for our product candidates or any future product candidates. FDA, EMA and MHRA approval of Rhopressa® and Rocklatan® do not constitute regulatory approval of these products in jurisdictions outside of the United States or Europe and there is no assurance that we will receive regulatory approval for Rhopressa® and Rocklatan® in such jurisdictions. In addition, the clinical trials discussed in this report are preliminary and the outcome of such clinical trials 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 clinical trials findings discussed in this report, 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 report, 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 report. 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 report, they may not be predictive of results or developments in future periods.

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

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

AERIE PHARMACEUTICALS, INC.

Condensed Consolidated Balance Sheets
(Unaudited)
(in thousands, except share data)

	MARCH 31, 2021	DECEMBER 31, 2020
Assets		
Current assets		
Cash and cash equivalents	$ 122,695	$ 151,570
Short-term investments	85,509	88,794
Accounts receivable, net	46,150	56,022
Inventory	28,324	27,059
Prepaid expenses and other current assets	10,899	8,310
Total current assets	293,577	331,755
Property, plant and equipment, net	53,283	54,260
Operating lease right-of-use assets	13,241	14,084
Other assets	2,627	1,946
Total assets	$ 362,728	$ 402,045
Liabilities and Stockholders' (Deficit) Equity		
Current liabilities		
Accounts payable	$ 6,520	$ 8,826
Accrued expenses and other current liabilities	82,792	90,723
Operating lease liabilities	4,052	4,923
Total current liabilities	93,364	104,472
Convertible notes, net	216,088	210,373
Deferred revenue, non-current	51,605	50,858
Long-term operating lease liabilities	9,914	10,206
Other non-current liabilities	2,125	2,168
Total liabilities	373,096	378,077
Commitments and contingencies (Note 12)		
Stockholders' (deficit) equity		
Preferred stock, $0.001 par value; 15,000,000 shares authorized as of March 31, 2021 and December 31, 2020; none issued and outstanding	—	—
Common stock, $0.001 par value; 150,000,000 shares authorized as of March 31, 2021 and December 31, 2020; 46,893,822 and 46,821,644 shares issued and outstanding as of March 31, 2021 and December 31, 2020, respectively	47	47
Additional paid-in capital	1,110,714	1,103,074
Accumulated other comprehensive loss	(64)	(52)
Accumulated deficit	(1,121,065)	(1,079,101)
Total stockholders' (deficit) equity	(10,368)	23,968
Total liabilities and stockholders' (deficit) equity	$ 362,728	$ 402,045

The accompanying notes are an integral part of these condensed consolidated financial statements.

AERIE PHARMACEUTICALS, INC.

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

	THREE MONTHS ENDED MARCH 31,	
	2021	**2020**
Product revenues, net	$ 22,970	$ 20,341
Total revenues, net	22,970	20,341
Costs and expenses:		
Cost of goods sold	6,700	6,092
Selling, general and administrative	32,598	36,902
Pre-approval commercial manufacturing	—	2,114
Research and development	17,891	19,173
Total costs and expenses	57,189	64,281
Loss from operations	(34,219)	(43,940)
Other (expense) income, net	(7,714)	(5,222)
Loss before income taxes	(41,933)	(49,162)
Income tax expense (benefit)	31	(33)
Net loss	$ (41,964)	$ (49,129)
Net loss per common share—basic and diluted	$ (0.91)	$ (1.07)
Weighted average number of common shares outstanding—basic and diluted	46,109,080	45,792,504
Net loss	$ (41,964)	$ (49,129)
Unrealized loss on available-for-sale investments, net	(12)	(28)
Comprehensive loss	$ (41,976)	$ (49,157)

The accompanying notes are an integral part of these condensed consolidated financial statements.

AERIE PHARMACEUTICALS, INC.

Condensed Consolidated Statements of Stockholders' (Deficit) Equity
(Unaudited)
(in thousands, except share data)

	COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED OTHER COMPREHENSIVE LOSS	ACCUMULATED DEFICIT	TOTAL
	SHARES	AMOUNT				
Balances at December 31, 2019	46,464,669	$ 46	$ 1,062,996	$ (92)	$ (896,000)	$ 166,950
Issuance of common stock upon exercise of stock options and warrants	5,811	—	44	—	—	44
Issuance of common stock for restricted stock awards, net	5,705	—	(1,466)	—	—	(1,466)
Stock-based compensation	—	—	10,838	—	—	10,838
Other comprehensive loss	—	—	—	(28)	—	(28)
Net loss	—	—	—	—	(49,129)	(49,129)
Balances at March 31, 2020	46,476,185	$ 46	$ 1,072,412	$ (120)	$ (945,129)	$ 127,209

	COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED OTHER COMPREHENSIVE LOSS	ACCUMULATED DEFICIT	TOTAL
	SHARES	AMOUNT				
Balances at December 31, 2020	46,821,644	$ 47	$ 1,103,074	$ (52)	$ (1,079,101)	$ 23,968
Issuance of common stock upon exercise of stock options and warrants	62,016	—	26	—	—	26
Issuance of common stock for restricted stock awards, net	10,162	—	(1,127)	—	—	(1,127)
Stock-based compensation	—	—	8,741	—	—	8,741
Other comprehensive loss	—	—	—	(12)	—	(12)
Net loss	—	—	—	—	(41,964)	(41,964)
Balances at March 31, 2021	46,893,822	$ 47	$ 1,110,714	$ (64)	$ (1,121,065)	$ (10,368)

The accompanying notes are an integral part of these condensed consolidated financial statements.

AERIE PHARMACEUTICALS, INC.

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

	THREE MONTHS ENDED MARCH 31,	
	2021	**2020**
Cash flows from operating activities		
Net loss	$ (41,964)	$ (49,129)
Adjustments to reconcile net loss to net cash used in operating activities		
Depreciation	1,499	1,591
Amortization and accretion	7,408	6,585
Stock-based compensation	8,749	10,529
Other non-cash	1,116	(39)
Changes in operating assets and liabilities		
Accounts receivable, net	9,872	(4,587)
Inventory	(1,052)	1,048
Prepaid, current and other assets	(4,286)	(2,410)
Accounts payable, accrued expenses and other current liabilities	(10,297)	(3,952)
Operating lease liabilities	(1,846)	(1,458)
Deferred revenue	747	—
Net cash used in operating activities	(30,054)	(41,822)
Cash flows from investing activities		
Purchase of available-for-sale investments	(25,236)	(15,834)
Proceeds from sales and maturities of investments	28,288	50,557
Purchase of property, plant and equipment	(772)	(1,240)
Net cash provided by investing activities	2,280	33,483
Cash flows from financing activities		
Payments related to issuance of stock for stock-based compensation arrangements, net	(1,101)	(1,422)
Net cash used in financing activities	(1,101)	(1,422)
Net change in cash and cash equivalents	(28,875)	(9,761)
Cash and cash equivalents, at beginning of period	151,570	143,940
Cash and cash equivalents, at end of period	$ 122,695	$ 134,179
Non-cash investing and financing activities		
Purchase of property, plant and equipment	$ 182	$ 254

The accompanying notes are an integral part of these condensed consolidated financial statements.

AERIE PHARMACEUTICALS, INC.

Notes to the Condensed Consolidated Financial Statements
(Unaudited)

1. The Company

Aerie Pharmaceuticals, Inc. ("Aerie"), with its wholly-owned subsidiaries, Aerie Distribution, Inc., Aerie Pharmaceuticals Limited, Aerie Pharmaceuticals Ireland Limited and Avizorex Pharma S.L. ("Aerie Distribution," "Aerie Limited," "Aerie Ireland Limited" and "Avizorex," respectively, together with Aerie, the "Company"), is 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, ocular surface diseases and retinal diseases. The Company has its principal executive offices in Durham, North Carolina, and operates as one business segment.

U.S Commercial Products

The Company has developed and commercialized two U.S. Food and Drug Administration ("FDA") approved products, Rhopressa® (netarsudil ophthalmic solution) 0.02% ("Rhopressa®") and Rocklatan® (netarsudil/ latanoprost ophthalmic solution) 0.02%/0.005% ("Rocklatan®"), which are sold in the United States and comprise its glaucoma franchise. Rhopressa® is a once-daily eye drop designed to reduce elevated intraocular pressure ("IOP") in patients with open-angle glaucoma or ocular hypertension. Rocklatan® is a once-daily fixed-dose combination of Rhopressa® and latanoprost, the most widely-prescribed drug for the treatment of patients with open-angle glaucoma. The Company is commercializing Rhopressa®, which was launched in the United States in April 2018, and Rocklatan®, which was launched in the United States in May 2019.

Outside the United States

In addition to actively promoting Rhopressa® and Rocklatan® in the United States, the Company's strategy also includes developing business opportunities outside of the United States including the successful commercialization of Rhopressa® and Rocklatan® in Europe, Japan and other regions. At present, the Company has a development and commercialization partner for Japan and certain other Asian countries, and is evaluating potential collaborators for Europe and other regions. Rhopressa® and Rocklatan® will be marketed under the names Rhokiinsa® and Roclanda®, respectively, if ultimately commercialized in Europe.

In Europe, Rhokiinsa® and Roclanda® were granted a Centralised Marketing Authorisation ("Centralised MA") by the European Commission ("EC") in November 2019 and January 2021, respectively. In April 2021, Roclanda® received marketing authorisation from the Medicines and Healthcare Products Regulatory Agency ("MHRA") in Great Britain. As the EC decision was received after the end of the Brexit transition period, the Company was required to complete a further administrative step in order to obtain authorisation in Great Britain, which has now been granted.

The Company reported positive interim topline 90-day efficacy data in September 2020 for the Phase 3b clinical trial for Roclanda®, named Mercury 3, a six-month efficacy and safety trial designed to compare Roclanda® to Ganfort®, a fixed-dose combination product marketed in Europe of bimatoprost (a prostaglandin analog), and timolol (a beta blocker). As a result of the positive Mercury 3 results, discussions are underway with third parties, who have expressed interest in a commercialization partnership in and potentially beyond Europe, while the Company has been simultaneously preparing on its own for pricing discussions in Germany.

In Japan, the Company entered into a Collaboration and License Agreement (the "Santen Agreement") with Santen Pharmaceuticals Co., Ltd. ("Santen") in October 2020 to advance its clinical development and ultimately commercialize Rhopressa® and Rocklatan® in Japan and eight other countries in Asia. See Note 3 for additional information. The Company initiated a Rhopressa® Phase 3 clinical trial in December 2020, the first of three expected Phase 3 clinical trials in Japan. Clinical trials for Rocklatan® in Japan have not yet begun.

Glaucoma Product Manufacturing

The Company has a sterile fill production facility in Athlone, Ireland, for the production of its FDA approved products and clinical supplies. The Company received FDA approval to produce Rocklatan® and Rhopressa® at the Athlone manufacturing plant for commercial distribution in the United States in January 2020 and September 2020, respectively. The manufacturing plant began manufacturing commercial supplies of Rocklatan® during the first quarter of 2020 and Rhopressa® in the third quarter of 2020 for distribution to the United States. Shipments of commercial supply of Rocklatan® and Rhopressa® from the Athlone manufacturing plant to the United States commenced in the third quarter of 2020 and in the fourth quarter of 2020,

respectively. The Athlone manufacturing plant has also manufactured clinical supplies of Rhopressa® for the Phase 3 clinical trials in Japan.

Product Candidates and Pipeline

The Company is furthering the development of its product candidates focused on dry eye and retinal diseases, particularly AR-15512, AR-1105, AR-13503 SR and AR-14034 SR, described below. The Company acquired Avizorex, a Spanish ophthalmic pharmaceutical company, developing therapeutics for the treatment of dry eye disease, in late 2019. The active ingredient in AR-15512 is a potent and selective agonist of the TRPM8 ion channel, a cold sensor and osmolarity sensor that regulates tear production and blink rate. In addition, activating the TRPM8 receptor may reduce ocular discomfort by promoting a cooling sensation. The Investigational New Drug Application ("IND") for AR-15512 eye drop for dry eye became effective in September 2020, allowing Aerie to initiate clinical studies in the treatment of dry eye. The Company is currently testing two concentrations of AR-15512 in an ongoing 90-day Phase 2b clinical trial with 360 subjects, which could potentially be considered pivotal. The Company initiated this now fully enrolled clinical trial, named COMET-1, in October 2020 and a topline readout is expected in the third quarter of 2021.

The Company is currently developing three sustained-release implants focused on retinal diseases, AR-1105, AR-13503 SR and AR-14034 SR. In July 2020, the Company completed a Phase 2 clinical trial for AR-1105, a dexamethasone steroid implant, in patients with macular edema due to retinal vein occlusion ("RVO"). Also, in July 2020, the Company reported topline results of the Phase 2 clinical trial for AR-1105 indicating sustained efficacy of up to six months, an important achievement in validating the capabilities of Aerie's sustained release platform. The Company is in the process of meeting with regulatory agencies in order to harmonize development plans across both Europe and the United States and continues to evaluate next steps regarding clinical and regulatory pathways for Phase 3 clinical trials along with commercialization prospects in both markets.

The Company is also developing AR-13503, a Rho kinase ("ROCK") and Protein kinase C inhibitor that is the active ingredient in the AR-13503 sustained-release implant. The IND for AR-13503 SR became effective in April 2019, allowing the Company to initiate human studies in the treatment of wet age-related macular degeneration (age-related macular degeneration, "AMD") and diabetic macular edema ("DME"). The Company initiated a first-in-human clinical safety study for AR-13503 SR in the third quarter of 2019. The Company expects to complete the dose escalation safety evaluation with the current implant design for AR-13503 SR in the first quarter of 2022.

The preclinical stage sustained-release implant AR-14034 SR, is being designed to deliver the active ingredient axitinib, a potent small molecule pan-VEGF receptor inhibitor. AR-14034 SR has the potential to provide a duration of effect of approximately one year with a once per-year injection. It may potentially be used to treat DME, wet AMD and related diseases of the retina. IND-enabling preclinical studies are underway and the Company anticipates filing an IND for AR-14034 SR with the FDA in the second half of 2022.

Liquidity

The Company commenced generating product revenues related to the sales in the United States of Rhopressa® in the second quarter of 2018 and Rocklatan® in the second quarter of 2019. The Company's activities prior to the commercial launch of Rhopressa® had primarily consisted of developing product candidates, raising capital and performing research and development activities. The Company has incurred losses and experienced negative operating cash flows since inception. The Company had previously funded its operations primarily through the sale of equity securities and issuance of convertible notes prior to generating product revenues. In September 2019, the Company issued an aggregate principal amount of $316.25 million of 1.50% convertible senior notes due 2024 (the "Convertible Notes") (Note 10). Further, in October 2020, the Company entered into the Santen Agreement, pursuant to which Santen paid an upfront payment of $50.0 million (Note 3).

The Company expects to incur ongoing operating losses until such a time when Rhopressa® or Rocklatan® or any current or future product candidates or future product candidates, if approved, generate sufficient cash flows for the Company to achieve profitability. Accordingly, the Company may be required to obtain further funding through debt or equity offerings or other sources. Adequate additional funding may not be available to the Company on acceptable terms, or at all. If the Company is unable to raise capital when needed or on acceptable terms, it may be forced to delay, reduce or eliminate its research and development programs or commercialization and manufacturing efforts.

2. Significant Accounting Policies

Basis of Presentation

The Company's interim condensed consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP"). In the opinion of management, the Company has made all necessary adjustments, which include normal recurring adjustments necessary for a fair statement of the Company's condensed consolidated financial position and results of operations for the interim periods presented. Certain information and disclosures normally included in the annual consolidated financial statements prepared in accordance with U.S. GAAP have been condensed or omitted. These interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and accompanying notes for the year ended December 31, 2020 included in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on February 26, 2021. The results for the three months ended March 31, 2021 are not necessarily indicative of the results to be expected for a full year, any other interim periods or any future year or period.

Principles of Consolidation

The interim condensed consolidated financial statements include the accounts of Aerie and its wholly-owned subsidiaries. All intercompany accounts, transactions and profits have been eliminated in consolidation.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and reported amounts of income and expenses during the reporting periods. Significant items subject to such estimates and assumptions include revenue recognition, acquisitions, stock-based compensation and fair value measurements. On March 11, 2020, the World Health Organization declared the coronavirus ("COVID-19") outbreak a pandemic. The full extent to which COVID-19 will directly or indirectly impact the Company's business, results of operations and financial condition, including net product revenue, cost and expenses, reserves and allowances, manufacturing and clinical trials, will depend on future developments that are highly uncertain, including as a result of new information that may emerge concerning COVID-19 and the actions taken to contain or treat it, as well as the economic impact on eye-care professionals, patients, third parties and markets. Actual results could differ from the Company's estimates.

Adoption of New Accounting Standards

In December 2019, the Financial Accounting Standards Board ("FASB") issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"), which simplifies the accounting for income taxes by removing certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. The new ASU also simplifies aspects of the accounting for franchise taxes and enacted changes in tax laws or rates. These changes aim to improve the overall usefulness of disclosures to financial statement users and reduce unnecessary costs to companies when preparing the disclosures. The guidance was effective for the Company beginning on January 1, 2021 and prescribes different transition methods for the various provisions. The adoption of ASU 2019-12 did not have a material impact on the Company's consolidated financial statements and disclosures.

Recent Accounting Pronouncements

In August 2020, the FASB issued ASU No. 2020-06, *Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40)* ("ASU 2020-06") to address the complexity associated with applying GAAP to certain financial instruments with characteristics of liabilities and equity. This ASU includes amendments to the guidance on convertible instruments and the derivative scope exception for contracts in an entity's own equity. ASU 2020-06 also simplifies the accounting for convertible instruments, which includes eliminating the cash conversion accounting model for convertible instruments. Additionally, ASU 2020-06 will require entities to use the "if-converted" method when calculating diluted earnings per share for convertible instruments. The guidance is effective for the Company beginning on January 1, 2022 and prescribes different transition methods for the various provisions. The Company is currently evaluating the impact of ASU 2020-06 on its consolidated financial statements and disclosures.

Net Loss per Common Share

Basic net loss per common share ("Basic EPS") is calculated by dividing the net loss by the weighted average number of shares of common stock outstanding for the period, without consideration for potentially dilutive securities. Diluted net loss per share ("Diluted EPS") gives effect to all dilutive potential shares of common stock outstanding during this period. For Diluted EPS, net loss used in calculating Basic EPS may be adjusted for certain items related to the dilutive securities.

For all periods presented, Aerie's potential common stock equivalents have been excluded from the computation of Diluted EPS as their inclusion would have had an anti-dilutive effect.

The potential common stock equivalents that have been excluded from the computation of Diluted EPS consist of the following:

	THREE MONTHS ENDED MARCH 31,	
	2021	**2020**
Outstanding stock options	8,720,368	8,701,163
Stock purchase warrants	—	4,500
Non-vested restricted stock awards and performance share units	714,005	633,865
Non-vested restricted stock units	95,238	30,938
Total	9,529,611	9,370,466

3. Revenue Recognition

Product Revenues

Net product revenues for the three months ended March 31, 2021 and 2020 were generated from sales of Rhopressa® and Rocklatan®, the Company's glaucoma franchise products, which were commercially launched in the United States in April 2018 and May 2019, respectively. Aerie's customers include a limited number of national and select regional wholesalers (the "distributors"). For the three months ended March 31, 2021, three distributors accounted for 36%, 30% and 33% of total revenues, respectively. For the three months ended March 31, 2020, three distributors accounted for 37%, 33% and 28% of total revenues, respectively. Product affordability for the patient drives consumer acceptance, and this is generally managed through coverage by third-party payers, such as government or private healthcare insurers and pharmacy benefit managers ("Third-party Payers") and such product may be subject to rebates and discounts payable directly to those Third-party Payers.

Product revenue is recorded net of trade discounts, allowances, rebates, chargebacks, estimated returns and other incentives, discussed below. These reserves are classified as either reductions of accounts receivable or as current liabilities. Amounts billed or invoiced are included in accounts receivable, net on the condensed consolidated balance sheets. The Company did not have any contract assets (unbilled receivables) as of March 31, 2021 or December 31, 2020, as customer invoicing generally occurs before or at the time of revenue recognition. The Company did not have any contract liabilities as of March 31, 2021 or December 31, 2020, as the Company did not receive payments in advance of fulfilling its performance obligations to its customers. The Company calculates its net product revenue based on the wholesale acquisition cost that the Company charges its distributors for Rhopressa® and Rocklatan® less provisions for (i) trade discounts and allowances, such as discounts for prompt payment and distributor fees, (ii) estimated rebates to Third-party Payers, estimated payments for Medicare Part D prescription drug program coverage gap (commonly called the "donut hole"), patient co-pay program coupon utilization, chargebacks and other discount programs and (iii) reserves for expected product returns. Provisions for revenue reserves reduced product revenues by $50.8 million and $43.6 million in aggregate for the three months ended March 31, 2021 and 2020, respectively, a significant portion of which related to commercial and Medicare Part D rebates.

Trade Discounts and Allowances: The Company generally provides discounts on sales of Rhopressa® and Rocklatan® to its distributors for prompt payment and pays fees for distribution services and for certain data that distributors provide to the Company. The Company expects its distributors to earn these discounts and fees, and accordingly deducts the full amount of these discounts and fees from its gross product revenues at the time such revenues are recognized.

Rebates, Chargebacks and Other Discounts: The Company contracts with Third-party Payers for coverage and reimbursement of Rhopressa® and Rocklatan®. The Company estimates the rebates and chargebacks it expects to be obligated to provide to Third-party Payers and deducts these estimated amounts from its gross product revenue at the time the revenue is recognized. The Company estimates the rebates and chargebacks that it expects to be obligated to provide to Third-party Payers based upon (i) the Company's contracts and negotiations with these Third-party Payers, (ii) estimates regarding the payer mix for Rhopressa® and Rocklatan® based on third-party data and utilization, (iii) inventory held by distributors and (iv) estimates of inventory held at the retail channel. Other discounts include the Company's co-pay assistance coupon programs for commercially-insured patients meeting certain eligibility requirements. The calculation of the accrual for co-pay assistance is based on an estimate of claims and the cost per claim that the Company expects to pay associated with product that has been recognized as revenue.

Product Returns: The Company estimates the amount of Rhopressa® and Rocklatan® that will be returned and deducts these estimated amounts from its gross revenue at the time the revenue is recognized. The Company currently estimates product returns based on historical information regarding returns of Rhopressa® and Rocklatan® as well as historical industry information regarding rates for comparable pharmaceutical products and product portfolios, the estimated remaining shelf life of Rhopressa® and Rocklatan® shipped to distributors, and contractual agreements with the Company's distributors intended to limit the amount of inventory they maintain. Reporting from the distributors includes distributor sales and inventory held by distributors, which provides the Company with visibility into the distribution channel to determine when the product would be eligible to be returned.

Santen Collaboration and License Agreement

In October 2020, Aerie Ireland Limited entered into a Collaboration and License Agreement with Santen Pharmaceutical Co., Ltd., a Japanese pharmaceutical company dedicated to ophthalmology that carries out research, development, marketing and sales of pharmaceuticals, over-the-counter products and medical devices. Pursuant to the Santen Agreement, Aerie Ireland Limited granted to Santen the exclusive right to develop, manufacture, market and commercialize Rhopressa® and Rocklatan® (the "Licensed Products") in Japan, South Korea, Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam and Taiwan (such jurisdictions collectively, the "Territories"). The Company is the sole manufacturer of the Licensed Products for Santen.

Under the Santen Agreement, Aerie Ireland Limited granted Santen a first right of negotiation for the rights to the Licensed Products in any Asian countries other than the Territories.

Under the Santen Agreement, Santen made an upfront payment to Aerie Ireland Limited of $50.0 million (the "Upfront Payment") and Aerie Ireland Limited will earn various development milestones of up to $39.0 million and sales milestones of up to $60.0 million upon the achievement of certain events. In addition, Santen will pay Aerie Ireland Limited a royalty in excess of 25% of the Licensed Products' net sales, such consideration consisting of the cost of products supplied to Santen from Aerie Ireland Limited and a royalty for the Company's intellectual property. Santen will be responsible for sales, marketing and pricing decisions relating to the Licensed Products. Santen is also responsible for all development and commercialization costs and activities related to the Licensed Products in the Territories, except that Aerie Ireland Limited shares 50% of the costs related to conducting the first Rhopressa® Phase 3 clinical trial in Japan, which commenced in the fourth quarter of 2020.

The term of the Santen Agreement varies on a country-by-country basis in the Territory until the later of (i) the expiration of the last to expire valid patent claim covering the Licensed Product and (ii) 12 years from the date of the first commercial sale of each Licensed Products under a New Drug Application approval, marketing authorization or the equivalent. The Santen Agreement may be terminated by either Aerie Ireland Limited or Santen upon the other party's material breach or bankruptcy or insolvency. Aerie Ireland Limited may also terminate the Santen Agreement upon a patent challenge by Santen, and Santen may terminate the Santen Agreement in its discretion if, following marketing authorization for Rhopressa® in Japan, Santen reasonably determines that the Licensed Products are not commercially viable in the Territory (effective upon 180 days' prior written notice). In addition, in the event that patents are issued that may prevent the commercialization of the Licensed Products, Santen would have the right to terminate the Santen Agreement and require Aerie Ireland Limited's repayment of up to approximately 85% of the Upfront Payment, all development milestone payments and 50% of the development expenses incurred by Santen. In the event of termination, the Licensed Products in the applicable Territories will revert to the Company.

Deferred revenue, non-current as of March 31, 2021 and December 31, 2020 was $51.6 million and $50.9 million, respectively, and included the Upfront Payment as well as Santen's portion of shared costs related to conducting the first Rhopressa® Phase 3 clinical trial in Japan, which commenced in the fourth quarter of 2020. While the Company determined that the license was a right to use the Company's intellectual property and as of the effective date of the Santen Agreement, the Company had provided all necessary information to Santen to benefit from the license and the license term had begun, revenue was not recognized upon satisfaction of the performance obligation due to the uncertainty around potential termination in the event that patents are issued that may prevent the commercialization of the Licensed Products.

The Company will recognize the Upfront Payment, and any other potential future development milestones and sales milestones, when it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur. The Company will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

4. Investments

Cash, cash equivalents and investments as of March 31, 2021 included the following:

(in thousands)	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	FAIR VALUE
Cash and cash equivalents:				
Cash and cash equivalents	$ 122,695			$ 122,695
Total cash and cash equivalents	$ 122,695	$ —	$ —	$ 122,695
Investments:				
Commercial paper (due within 1 year)	$ 42,942	$ 1	$ (41)	$ 42,902
Corporate bonds (due within 1 year)	42,631	—	(24)	42,607
Total investments	$ 85,573	$ 1	$ (65)	$ 85,509
Total cash, cash equivalents and investments	$ 208,268	$ 1	$ (65)	$ 208,204

Cash, cash equivalents and investments as of December 31, 2020 included the following:

(in thousands)	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	FAIR VALUE
Cash and cash equivalents:				
Cash and cash equivalents	$ 151,570	$ —	$ —	$ 151,570
Total cash and cash equivalents	$ 151,570	$ —	$ —	$ 151,570
Investments:				
Commercial paper (due within 1 year)	44,122	5	(23)	44,104
Corporate bonds (due within 1 year)	44,724	3	(37)	44,690
Total investments	$ 88,846	$ 8	$ (60)	$ 88,794
Total cash, cash equivalents and investments	$ 240,416	$ 8	$ (60)	$ 240,364

Interest income earned on the Company's cash, cash equivalents and investments was $0.1 million and $1.1 million for the three months ended March 31, 2021 and 2020, respectively. Realized gains or losses were immaterial during the three months ended March 31, 2021 and 2020.

As of March 31, 2021, the Company had no equity securities. As of December 31, 2020, the fair value of the equity securities held at the end of the period was $1.3 million. For the three months ended March 31, 2021, the Company had $1.0 million of losses on equity securities sold during the period.

5. Fair Value Measurements

The following tables summarize the fair value of financial assets and liabilities that are measured at fair value and the classification by level of input within the fair value hierarchy:

	FAIR VALUE MEASUREMENTS AS OF MARCH 31, 2021			
(in thousands)	LEVEL 1	LEVEL 2	LEVEL 3	TOTAL
Cash and cash equivalents:				
Cash and cash equivalents	$ 122,695			$ 122,695
Total cash and cash equivalents:	$ 122,695	$ —	$ —	$ 122,695
Investments:				
Commercial paper		$ 42,902		42,902
Corporate bonds		42,607		42,607
Total investments	$ —	$ 85,509	$ —	$ 85,509
Total cash, cash equivalents and investments:	$ 122,695	$ 85,509	$ —	$ 208,204

(in thousands)	FAIR VALUE MEASUREMENTS AS OF DECEMBER 31, 2020			
	LEVEL 1	LEVEL 2	LEVEL 3	TOTAL
Cash and cash equivalents:				
Cash and cash equivalents	$ 151,570	$ —	$ —	$ 151,570
Total cash and cash equivalents:	$ 151,570	$ —	$ —	$ 151,570
Investments:				
Commercial paper	$ —	$ 44,104	$ —	$ 44,104
Corporate bonds	—	44,690	—	44,690
Total investments	$ —	$ 88,794	$ —	$ 88,794
Total cash, cash equivalents and investments:	$ 151,570	$ 88,794	$ —	$ 240,364

The fair value of the Convertible Notes, which differs from their carrying value, is influenced by interest rates, stock price and stock price volatility and is determined by prices observed in market trading. The market for trading of the Convertible Notes is not considered to be an active market and therefore the estimate of fair value is based on Level 2 inputs. The estimated fair value of the Convertible Notes was $332.9 million at March 31, 2021.

There were no transfers between the different levels of the fair value hierarchy during the three months ended March 31, 2021 and 2020.

6. Inventory

Inventory consists of the following:

(in thousands)	MARCH 31, 2021	DECEMBER 31, 2020
Raw materials	$ 2,695	$ 1,875
Work-in-process	22,365	21,648
Finished goods	3,264	3,536
Total inventory	$ 28,324	$ 27,059

For the three months ended March 31, 2021 and 2020, $4.4 million and $3.5 million, respectively, of idle capacity cost associated with the Company's Athlone manufacturing plant was recorded to costs of goods sold. The idle capacity results from the manufacturing plant having commenced operations earlier in 2020 and not having yet reached full capacity.

7. Property, Plant and Equipment, Net

Property, plant and equipment, net consists of the following:

(in thousands)	MARCH 31, 2021	DECEMBER 31, 2020
Manufacturing equipment	$ 21,822	$ 21,705
Laboratory equipment	8,391	7,948
Furniture and fixtures	1,681	1,681
Software, computer and other equipment	7,838	7,836
Leasehold improvements	30,433	30,178
Construction-in-progress	1,243	1,481
Property, plant and equipment	71,408	70,829
Less: Accumulated depreciation	(18,125)	(16,569)
Property, plant and equipment, net	$ 53,283	$ 54,260

8. Leases

The Company has operating leases for corporate offices, research and development facilities, and a fleet of vehicles. The properties primarily relate to the Company's principal executive office and research facility located in Durham, North Carolina, regulatory, commercial support and other administrative activities located in Irvine, California, and clinical, finance and legal operations located in Bedminster, New Jersey. The Durham, North Carolina, facility consists of approximately 61,000 square feet of laboratory and office space under leases that expire between January 2022 and June 2024 and the Irvine, California, location consists of approximately 37,300 square feet of office space under a lease that expires in January 2022. The Bedminster, New Jersey, location consists of approximately 34,000 square feet of office space under a lease that expires in October 2029. There are also small offices in Ireland, the United Kingdom and Japan.

The Company is leasing approximately 30,000 square feet of interior floor space for its manufacturing plant in Athlone, Ireland. The Company is reasonably certain it will remain in the lease through the end of its lease term in 2037, however, the Company is permitted to terminate the lease as early as September 2027.

The Company's operating leases have remaining lease terms of approximately 1 year to 16 years, some of which include options to extend the leases.

Balance sheet information related to leases was as follows:

(in thousands)	MARCH 31, 2021	DECEMBER 31, 2020
Operating Leases		
Operating lease right-of-use assets	$ 13,241	$ 14,084
Operating lease liabilities	$ 4,052	$ 4,923
Long-term operating lease liabilities	9,914	10,206
Total operating lease liabilities	$ 13,966	$ 15,129

9. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following:

(in thousands)	MARCH 31, 2021	DECEMBER 31, 2020
Accrued expenses and other current liabilities:		
Accrued compensation and benefits	$ 9,653	$ 15,207
Accrued consulting and professional fees	3,215	2,645
Accrued research and development [(1)]	3,821	2,222
Accrued revenue reserves[(2)]	61,472	66,552
Accrued other [(3)]	4,631	4,097
Total accrued expenses and other current liabilities	$ 82,792	$ 90,723

(1) Comprised primarily of accruals related to fees for investigative sites, contract research organizations and other service providers that assist in conducting preclinical research studies and clinical trials.

(2) Comprised primarily of accruals related to commercial and government rebates as well as returns.

(3) Comprised primarily of accruals related to interest payable as well as other business-related expenses.

10. Debt

Convertible Notes

In September 2019, the Company issued an aggregate principal amount of $316.25 million of Convertible Notes to qualified institutional buyers pursuant to Rule 144A of the Securities Act of 1933, as amended. The Convertible Notes, governed by an

indenture between the Company and a trustee, are senior, unsecured obligations and do not include financial and operating covenants nor any restrictions on the payments of dividends, the incurrence of indebtedness or the issuance or repurchase of securities by Aerie or any of its subsidiaries. Interest on the Convertible Notes is payable semi-annually in cash in arrears at a rate of 1.50% per annum on April 1 and October 1 of each year, which began on April 1, 2020. The Convertible Notes will mature on October 1, 2024 unless they are redeemed, repurchased or converted prior to such date. Prior to April 1, 2024, the Convertible Notes will be convertible at the option of holders only during certain periods and upon satisfaction of certain conditions. On and after April 1, 2024, the Convertible Notes will be convertible at the option of the holders any time until the close of business on the second scheduled trading day immediately preceding the maturity date. Upon conversion, the Convertible Notes may be settled in shares of Aerie common stock, cash or a combination, thereof, at the Company's election. The Company intends to settle the principal and interest amounts of the Convertible Notes in cash, and therefore, the Company currently would not expect the conversion to have a dilutive effect on the Company’s earnings per share, as applicable. However, the Company is currently evaluating the impact of ASU 2020-06 on its consolidated financial statements and disclosures, in which the Company will soon no longer be eligible to use the treasury stock method to reflect the shares underlying the Convertible Notes in the Company’s dilutive earnings per share. See Note 2 for additional information.

The Convertible Notes have an initial conversion rate of 40.04 shares of Aerie common stock per $1,000 principal amount of the Convertible Notes, which will be subject to customary anti-dilution adjustments in certain circumstances. This represents an initial effective conversion price of approximately $24.98 per share, which represents a premium of approximately 35% to the $18.50 per share closing price of Aerie common stock on September 4, 2019, the date the Company priced the offering.

The Company may redeem all or any portion of the Convertible Notes, at its option, on or after October 3, 2022, at a cash redemption price equal to 100% of the principal amount of the Convertible Notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date, but only if the last reported sale price of Aerie common stock exceeds 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending on, and including, the trading day immediately before the date the Company provides written notice of redemption; and the trading day immediately before the notice is sent.

Holders of Convertible Notes may require the Company to repurchase their Convertible Notes upon the occurrence of certain events that constitute a fundamental change under the indenture governing the Convertible Notes at a fundamental change repurchase price equal to 100% of the principal amount thereof, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

During the three months ended March 31, 2021, the conditions allowing holders of the Convertible Notes to elect to convert had not been met. As of March 31, 2021, the if-converted value of the Convertible Notes did not exceed the principal amount of the Convertible Notes.

The estimated fair value of the liability component of the Convertible Notes at the time of issuance was $187.9 million, and was determined based on a discounted cash flow analysis and a binomial lattice model. The valuation required the use of Level 3 unobservable inputs and subjective assumptions, including but not limited to the stock price volatility and bond yield. The effective interest rate on the liability component was 10.5% for the period from the date of issuance through March 31, 2021. The equity component of the Convertible Notes was recognized at issuance and represents the difference between the principal amount of the Convertible Notes and the fair value of the liability component of the Convertible Notes at issuance. The equity component was approximately $128.4 million at the time of issuance and its fair value is not remeasured as long as it continues to meet the conditions for equity classification.

In connection with the issuance of the Convertible Notes, the Company incurred debt issuance costs of $9.2 million for the three months ended December 31, 2019. In accordance with ASC Topic 470, *Debt*, these costs were allocated to debt and equity components in proportion to the allocation of proceeds. Issuance costs of $5.5 million were recorded as debt issuance costs in the net carrying value of Convertible Notes. The debt issuance costs are amortized on an effective interest basis over the term of the Convertible Notes. The remaining issuance costs of $3.7 million were recorded as additional paid-in capital, net with the equity component and such amounts are not subject to amortization.

The following table summarizes the carrying value of the Convertible Notes as of March 31, 2021:

(in thousands)	**MARCH 31, 2021**	**DECEMBER 31, 2020**
Gross proceeds	$ 316,250	$ 316,250
Unamortized debt discount	(96,083)	(101,565)
Unamortized issuance costs	(4,079)	(4,312)
Carrying value	$ 216,088	$ 210,373

The following table summarizes the interest expense recognized related to the Convertible Notes:

	THREE MONTHS ENDED MARCH 31,	
(in thousands)	**2021**	**2020**
Stated interest	$ 1,186	$ 1,193
Amortized debt discount	5,482	4,971
Amortized issuance costs	232	211
Interest Expense	$ 6,900	$ 6,375

Separately, in September 2019 the Company entered into privately negotiated capped call options with financial institutions. The capped call options cover, subject to customary anti-dilution adjustments, the number of shares of Aerie common stock that initially underlie the Convertible Notes. The cap price of the capped call options is $37.00 per share of Aerie common stock, representing a premium of 100% above the closing price of $18.50 per share of Aerie common stock on September 4, 2019, and is subject to certain adjustments under the terms of the capped call options. The capped call options are generally intended to reduce or offset potential dilution to Aerie common stock upon conversion of the Convertible Notes with such reduction and/ or offset, as the case may be, subject to a cap based on the cap price. The Company paid a total of $32.9 million in premiums for the capped call options, which was recorded as additional paid-in capital, using a portion of the gross proceeds from the issuance and sale of the Convertible Notes. The capped call options are excluded from diluted earnings per share because the impact would be anti-dilutive.

11. Stock-Based Compensation

Stock-based compensation expense for options granted, restricted stock awards (“RSAs”), RSAs with non-market performance and service conditions (“PSAs”), restricted stock units (“RSUs”) and stock appreciation rights (“SARs”) is reflected in the condensed consolidated statements of operations and comprehensive loss as follows:

	THREE MONTHS ENDED MARCH 31,	
(in thousands)	**2021**	**2020**
Cost of goods sold	$ 507	$ 497
Selling, general and administrative	6,255	6,908
Pre-approval commercial manufacturing	—	294
Research and development	1,987	2,830
Total	$ 8,749	$ 10,529

Equity Plans

The Company maintains three equity compensation plans, the 2005 Aerie Pharmaceutical Stock Plan (the “2005 Plan”), the 2013 Omnibus Incentive Plan (the “2013 Equity Plan”), which was amended and restated as the Aerie Pharmaceuticals, Inc. Second Amended and Restated Omnibus Incentive Plan (the “Second Amended and Restated Equity Plan”), as described below, and the Aerie Pharmaceuticals, Inc. Inducement Award Plan (the “Inducement Award Plan”), as described below. The 2005 Plan, the Second Amended and Restated Equity Plan and the Inducement Award Plan are referred to collectively as the “Plans.” The 2005 Plan was frozen in 2013 and no additional awards have been or will be made under the 2005 Plan.

On June 7, 2018, Aerie’s stockholders approved the adoption of the Second Amended and Restated Equity Plan to increase the number of shares issuable under the Plan by 4,500,000. The Second Amended and Restated Equity Plan provides for the granting of up to 10,229,068 equity awards in respect of Aerie common stock.

On December 7, 2016, Aerie’s Board of Directors approved the Inducement Award Plan which provides for the granting of up to 418,000 equity awards in respect of common stock of Aerie and was subsequently amended during the year ended December 31, 2017 to increase the equity awards that may be issued by an additional 874,500 shares. On December 5, 2019, the Inducement Award Plan was further amended by the Company’s Board of Directors to increase the number of shares issuable under the plan by 100,000 shares. Awards granted under the Inducement Award Plan are intended to qualify as employment inducement awards under NASDAQ Listing Rule 5635(c)(4).

Options to Purchase Common Stock

The following table summarizes the stock option activity under the Plans:

	NUMBER OF SHARES	WEIGHTED AVERAGE EXERCISE PRICE	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE (YEARS)	AGGREGATE INTRINSIC VALUE (000's)
Options outstanding at December 31, 2020	8,588,614	$ 27.36		
Granted	421,280	17.50		
Exercised	(63,370)	0.76		
Canceled	(226,156)	38.78		
Options outstanding at March 31, 2021	8,720,368	$ 26.78	5.9	$ 23,551
Options exercisable at March 31, 2021	6,464,439	$ 26.66	4.9	$ 21,828

As of March 31, 2021, the Company had $39.2 million of unrecognized compensation expense related to options granted under its equity plans. This expense is expected to be recognized over a weighted average period of 2.1 years as of March 31, 2021.

Restricted Stock Awards

The following table summarizes the RSA, including PSA, activity under the Plans:

	NUMBER OF SHARES	WEIGHTED AVERAGE FAIR VALUE PER SHARE
Non-vested RSAs at December 31, 2020	809,527	$ 29.03
Granted	94,132	17.61
Vested	(160,259)	44.62
Canceled	(29,395)	23.86
Non-vested RSAs at March 31, 2021	714,005	$ 24.23

As of March 31, 2021, the Company had $15.0 million of unrecognized compensation expense related to unvested RSAs. This expense is expected to be recognized over the weighted average period of 2.4 years as of March 31, 2021.

The vesting of the RSAs is time and service based with terms of one to four years. During the year ended December 31, 2017, the Company granted 98,817 RSAs with non-market performance conditions (PSAs) that vest upon the satisfaction of certain performance conditions and service conditions. As of the second quarter of 2020, all PSAs were vested.

Restricted Stock Units

The following table summarizes the RSU activity under the Plans:

	NUMBER OF SHARES	WEIGHTED AVERAGE FAIR VALUE PER SHARE
Non-vested RSUs at December 31, 2020	107,182	$ 14.43
Granted	1,407	19.18
Vested	(11,035)	19.25
Canceled	(2,316)	14.34
Non-vested RSUs at March 31, 2021	95,238	$ 13.95

As of March 31, 2021, the associated unrecognized compensation expense totaled $2.1 million. This expense is expected to be recognized over the weighted average period of 2.6 years as of March 31, 2021.

Stock Appreciation Rights

The following table summarizes the SAR activity under the Plans:

	NUMBER OF SHARES	WEIGHTED AVERAGE EXERCISE PRICE	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE (YEARS)	AGGREGATE INTRINSIC VALUE (000's)
SARs outstanding at December 31, 2020	212,044	$ 32.28		
Granted	5,000	18.68		
Canceled	(13,801)	28.43		
SARs outstanding at March 31, 2021	203,243	$ 32.20	3.3	$ 280
SARs exercisable at March 31, 2021	66,546	$ 45.16	2.5	$ 3

Holders of the SARs are entitled under the terms of the Plans to receive cash payments calculated based on the excess of Aerie's common stock price over the exercise price in their award; consequently, these awards are accounted for as liability-classified awards and the Company measures compensation cost based on their estimated fair value at each reporting date, net of actual forfeitures, if any.

12. Commitments and Contingencies

The Company may periodically become subject to legal proceedings and claims arising in connection with its business. The Company is not a party to any known litigation, is not aware of any material unasserted claims and does not have contingency reserves established for any litigation liabilities.

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

The following management's discussion and analysis should be read in conjunction with our unaudited condensed consolidated financial statements and related notes that appear elsewhere in this report and with our audited financial statements and related notes and management's discussion and analysis of financial condition and results of operations included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020, as filed with the SEC on February 26, 2021 ("2020 Form 10-K"). This management's discussion and analysis contains forward-looking statements that involve risks and uncertainties. Please see "Special Note Regarding Forward-Looking Statements" for additional factors relating to such statements and see "Risk Factors" in our 2020 Form 10-K and other documents we have filed or furnished with the SEC for a discussion of certain risk factors applicable to our business, financial condition and results of operations. Past operating results are not necessarily indicative of operating results in any future periods.

Overview

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, ocular surface diseases and retinal diseases.

U.S. Commercial Products

Our strategy is to successfully commercialize our U.S. Food and Drug Administration ("FDA") approved products, Rhopressa® (netarsudil ophthalmic solution) 0.02% ("Rhopressa®") and Rocklatan® (netarsudil and latanoprost ophthalmic solution) 0.02%/0.005% ("Rocklatan®"), which are sold in the United States and comprise our glaucoma franchise. We have obtained formulary coverage for Rhopressa® and Rocklatan® for the majority of lives covered under commercial plans and Medicare Part D plans. Our commercial team responsible for sales of Rhopressa® and Rocklatan® is targeting eye-care professionals throughout the United States and with the addition of a contract sales organization and a separate telesales team, we are able to reach over 16,000 eye-care professionals.

Rhopressa® is a once-daily eye drop designed to reduce elevated intraocular pressure ("IOP") in patients with open-angle glaucoma or ocular hypertension. Rhopressa® is taken in the evening and has shown in preclinical and clinical trials to be effective in reducing IOP, with a favorable safety profile.

The active ingredient in Rhopressa®, netarsudil, is an Aerie-owned Rho kinase ("ROCK") inhibitor. Rhopressa® increases the outflow of aqueous humor through the trabecular meshwork ("TM"), which accounts for approximately 80% of fluid drainage from the healthy eye and is the diseased tissue responsible for elevated IOP in glaucoma. Using this mechanism of action ("MOA"), we believe that Rhopressa® represents the first of a new drug class for reducing IOP in patients with glaucoma in over 20 years.

Rocklatan® is a once-daily fixed-dose combination of Rhopressa® and latanoprost, the most commonly prescribed drug for the treatment of patients with open-angle glaucoma. Rocklatan® is also taken in the evening, and similar to Rhopressa®, has shown in preclinical and clinical trials to be effective in reducing IOP, with a favorable safety profile.

Based on our clinical data, we believe that Rocklatan® has the potential to provide a greater IOP-reducing effect than any glaucoma medication currently marketed in the United States. We also believe that Rocklatan® competes with both prostaglandin analog ("PGA") and non-PGA therapies and may over time become the product of choice for patients requiring maximal IOP reduction, including those with higher IOPs and those who present with significant disease progression despite using currently available therapies.

Outside the United States

Our strategy also includes developing business opportunities outside of the United States including the successful commercialization of Rhopressa® and Rocklatan® in Europe, Japan and other regions. At present, we have a development and commercialization partner for Japan and certain other Asian countries, and are evaluating potential collaborators for Europe and other regions.

In Europe, Rhokiinsa® (marketed as Rhopressa® in the United States) was granted a Centralised Marketing Authorisation ("Centralised MA") by the European Commission ("EC") in November 2019. Roclanda® (marketed as Rocklatan® in the United States) was granted a Centralised MA by the EC in January 2021. In April 2021, Roclanda® received marketing authorisation from the Medicines and Healthcare Products Regulatory Agency ("MHRA") in Great Britain. As the EC decision was received after the end of the Brexit transition period, we were required to complete a further administrative step in order to obtain authorisation in Great Britain, which has now been granted.

We reported positive interim topline 90-day efficacy data in September 2020 for our Phase 3b clinical trial for Roclanda®, named Mercury 3, which we believe is important to the execution of our strategy in Europe. As a result of the positive Mercury 3 results and the Roclanda® approval in Europe, discussions are underway with third parties, who have expressed interest in a potential commercialization partnership in and potentially beyond Europe, while we are simultaneously preparing on our own for pricing discussions in Germany.

In Japan, we entered into a Collaboration and License Agreement (the "Santen Agreement") with Santen Pharmaceuticals Co., Ltd. ("Santen") in October 2020 to advance our clinical development and ultimately commercialize Rhopressa® and Rocklatan® in Japan and eight other countries in Asia. We initiated a Rhopressa® Phase 3 clinical trial in December 2020, the first of three expected Phase 3 clinical trials in Japan. Clinical trials for Rocklatan® in Japan have not yet begun.

Glaucoma Product Manufacturing

We have a sterile fill production facility in Athlone, Ireland, for the production of our FDA approved products and clinical supplies with the goal of having the Athlone manufacturing plant supply our ophthalmic products in all markets for which we received regulatory approval and are commercialized. The Athlone manufacturing plant began manufacturing commercial supplies of Rocklatan® in the first quarter of 2020 and Rhopressa® in the third quarter of 2020 for distribution to the United States. Shipments of commercial supply of Rocklatan® and Rhopressa® from the Athlone manufacturing plant to the United States commenced in the third quarter of 2020 and in the fourth quarter of 2020, respectively. The Athlone manufacturing plant has also manufactured clinical supplies of Rhopressa® for the Phase 3 clinical trials in Japan. As the Athlone manufacturing plant commenced operations in early 2020, it has not yet reached full capacity. We expect that the Athlone manufacturing plant will have adequate capacity to produce Rhopressa® and Rocklatan® in the United States as well as for both the European and Japanese commercial markets, if approved for commercial distribution in those markets. We expect that in 2021 the Athlone manufacturing plant will manufacture most of our ongoing needs for Rhopressa® and Rocklatan® in the United States. We may continue to use contract manufacturers to produce commercial supplies of Rhopressa® and Rocklatan® for distribution in the United States, but at reduced levels compared to before the Athlone manufacturing plant was operational.

Product Candidates and Pipeline

Our strategy also includes enhancing our longer-term commercial potential by identifying and advancing additional product candidates through our internal discovery efforts, our entry into potential research collaborations or in-licensing arrangements or our acquisition of additional ophthalmic products or technologies or product candidates that complement our current product portfolio.

AR-15512 is our product candidate for the treatment of dry eye disease for which we initiated a now fully enrolled Phase 2b clinical trial named COMET-1 in October 2020. Furthermore, we are developing three sustained-release implants focused on retinal diseases, AR-1105, AR-13503 SR and AR-14034 SR. For AR-1105, we successfully completed a large Phase 2 clinical trial for patients with macular edema due to retinal vein occlusion ("RVO") in July 2020, which indicates sustained efficacy of up to six months, an important achievement in validating the potential capabilities of Aerie's sustained release platform. With respect to future plans for AR-1105, we continue to evaluate next steps regarding clinical and regulatory pathways for Phase 3 clinical trials along with commercialization prospects in both Europe and the United States. For AR-13503 SR, we initiated a first in-human clinical safety study in the third quarter of 2019 for the treatment of wet age-related macular degeneration (age-related macular degeneration, "AMD") and diabetic macular edema ("DME"), which is currently ongoing. We expect to complete the dose escalation safety evaluation with the current implant design for AR-13503 SR in the first quarter of 2022. In addition, we are also working to advance our preclinical sustained-release retinal implant, AR-14034 SR, in which Investigational New Drug Application ("IND") enabling preclinical studies are underway. We anticipate filing an IND for AR-14034 SR with the FDA in the second half of 2022.

We discovered and developed the active ingredient in Rhopressa® and Rocklatan®, netarsudil, and AR-13503 through a rational drug design approach that coupled medicinal chemistry with high content screening of compounds in proprietary cell-based assays. We selected and formulated netarsudil for preclinical *in vivo* testing following a detailed characterization of over 3,000 synthesized ROCK inhibitors, a number that has since grown to approximately 4,000.

Impact of the COVID-19 Pandemic

In December 2019, there was an outbreak of a new strain of coronavirus ("COVID-19") and on March 11, 2020, the World Health Organization declared COVID-19 a pandemic. The COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains and workforce participation due to "shelter-in-place" restrictions by various governments worldwide and created significant volatility and disruption of financial markets.

The health and safety of our employees, patients, prescribers and community are of utmost importance during this time and we are complying with all requirements and mandates from various agencies and governments. We have taken precautionary measures to protect our employees and our stakeholders and adapted company policy to maintain the continuity of our business. We continue to operate effectively as most of our manufacturing plant personnel are working at the manufacturing plant with precautionary measures in place, while the balance of our workforce continues to primarily work from home.

While some eye-care professionals' offices continue to operate at reduced capacity, we are using a combination of in-person and virtual tools and resources to remain in contact with eye-care professionals. Aerie territory managers are experiencing successful engagement with eye-care professionals through either traditional face-to-face office meetings or virtual resources. Our sales force is interactively communicating with physicians via different technological platforms and local peer-to-peer educational meetings are primarily being implemented via webinars. Certain geographic communities have resumed in-person speaker programs, while adhering to strict national guidelines with appropriate social distancing. As part of the support of the eye-care community, our territory managers are either delivering or arranging for delivery of product samples to the eye-care professionals' offices when needed. To the extent the COVID-19 impacts are mitigated, in accordance with state and local government mandates, we expect that traditional face-to-face office meetings and in-person peer-to-peer education meetings to increase in the second half of 2021. Further, with the addition of a contract sales organization and a separate telesales team we are able to reach over 16,000 eye-care professionals.

We have observed no disruptions to date in the supply chain for the production of Rhopressa® and Rocklatan®. We believe we have approximately three years of starting materials and active pharmaceutical ingredient ("API") in inventory, and adequate supply of finished product on hand to support our commercial efforts for at least the next six months. Production of Rhopressa® and Rocklatan® is continuing.

Financial Overview

Our cash, cash equivalents and investments totaled $208.2 million as of March 31, 2021. We believe that our cash, cash equivalents and investments and projected cash flows from revenues will provide sufficient resources for our current ongoing needs through at least the next twelve months, though there may be need for additional financing activity as we continue to grow. See "—Liquidity and Capital Resources" below and Note 10 to our condensed consolidated financial statements included in this report for further discussion.

We have incurred net losses since our inception in June 2005. Until 2018, when we commenced commercial operations, our business activities were primarily limited to developing product candidates, raising capital and performing research and development activities. As of March 31, 2021, we had an accumulated deficit of $1,121.1 million. We recorded net losses of $42.0 million for the three months ended March 31, 2021. For the three months ended March 31, 2020 we recorded net losses of $49.1 million. Our capital resources and business efforts are largely focused on activities relating to the commercialization of Rhopressa® and Rocklatan®, advancing our product candidates and pipeline, global expansion and operating our manufacturing plant in Athlone, Ireland.

We expect to incur operating losses until such a time when Rhopressa® or Rocklatan® or any current or future product candidates, if approved, generate sufficient cash flows for us to achieve profitability. Accordingly, we may be required to obtain further funding through debt or equity offerings or other sources. Adequate additional funding may not be available to us on acceptable terms, or at all. If we are unable to raise capital when needed or on acceptable terms, we may be forced to delay, reduce or eliminate our research and development programs or commercialization or manufacturing efforts.

Product Revenues, Net

Rhopressa® and Rocklatan®, our glaucoma franchise products, were launched in the United States in April 2018 and May 2019, respectively. We commenced generating product revenues from sales of Rhopressa® and Rocklatan® during the second quarter of 2018 and 2019, respectively. Product affordability for the patient drives consumer acceptance, and this is generally managed through coverage by third-party payers, such as government or private healthcare insurers and pharmacy benefit managers ("Third-party Payers") and such product may be subject to rebates and discounts payable directly to those Third-party Payers. Our product revenues are recorded net of provisions relating to estimates for (i) trade discounts and allowances, such as

discounts for prompt payment and distributor fees, (ii) estimated rebates to Third-party Payers, estimated payments for Medicare Part D prescription drug program coverage gap (commonly called the “donut hole”), patient co-pay program coupon utilization, chargebacks and other discount programs and (iii) reserves for expected product returns. These estimates reflect current contractual and statutory requirements, known market events and trends, industry data, forecasted customer mix and lagged claims. Actual amounts may ultimately differ from these estimates. If actual results vary, estimates may be adjusted in the period such change in estimate becomes known, which may have an impact on earnings in the period of adjustment.

We will not generate any revenue from any product candidates or future product candidates unless and until we obtain regulatory approval and commercialize such products.

Cost of Goods Sold

Cost of goods sold consists of direct and indirect costs to procure and manufacture product sold, including third-party manufacturing costs. Prior to receiving FDA approval, these costs for Rhopressa® and Rocklatan® were expensed as pre-approval commercial manufacturing expenses (as defined below). We began capitalizing inventory costs for Rhopressa® and Rocklatan® after receipt of FDA approval. In January 2020 and September 2020, we received FDA approval to produce Rocklatan® and Rhopressa®, respectively, at the Athlone manufacturing plant for commercial distribution in the United States. Shipments of commercial supply of Rocklatan® from the Athlone manufacturing plant to the United States commenced in the third quarter of 2020. The Athlone manufacturing plant has manufactured clinical supplies of Rhopressa® for the Phase 3 clinical trials in Japan and has commenced shipping commercial supply of Rhopressa® to the United States in the fourth quarter of 2020. Production costs related to idle or underutilized capacity at the manufacturing plant in Athlone, Ireland, are not included in the cost of inventory but are charged directly to cost of goods sold on the condensed consolidated statements of operations and comprehensive loss in the period incurred. We expect cost of goods sold in 2021 to continue to be unfavorably impacted by idle capacity costs due to the underutilization at the Athlone manufacturing plant as a result of the Athlone manufacturing plant having become operational in early 2020 and not yet reaching full capacity, along with the potential for future inventory obsolescence write-offs, for which we do not expect the impact to be material. We expect the underutilization to continue to have an unfavorable impact on cost of goods sold that will decrease over time as the manufacturing plant reaches full capacity.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consist primarily of employee-related expenses, including salaries, benefits and stock-based compensation for all officers and employees in general management, sales and marketing, finance and administration. Other significant expenses include selling and marketing expenses, facilities expenses, shipping and handling costs and professional fees for audit, tax, legal and other services.

Pre-approval Commercial Manufacturing Expenses

Pre-approval commercial manufacturing expenses consist of costs incurred for commercial-related manufacturing activities for Rhopressa® and Rocklatan® prior to FDA approval. These costs include those associated with the manufacturing of inventory in anticipation of commercial launch, expenses associated with the establishment of both our manufacturing plant in Athlone, Ireland, and our additional API and drug product contract manufacturers as well as employee-related expenses, which includes salaries, benefits and stock-based compensation for commercial-related manufacturing personnel prior to regulatory approval.

We obtained regulatory approval to produce Rocklatan® and Rhopressa® in January 2020 and September 2020, respectively, in our Athlone, Ireland plant for commercial distribution in the United States as well as approval for our additional drug product contract manufacturers during early 2020. We do not expect any pre-approval commercial manufacturing expenses in 2021.

Research and Development Expenses

We expense research and development costs to operations as incurred. Research and development expenses consist primarily of costs incurred for the research and development of our preclinical and clinical candidates, including employee-related expenses for research and development personnel.

Other (Expense) Income, Net

Other (expense) income, net primarily includes interest expense, interest income, foreign exchange gains and losses and other income and expense. Interest expense consists of interest expense under the 1.50% convertible senior notes due 2024 (the “Convertible Notes”), including the amortization of debt discounts and issuance costs incurred. Interest income primarily consists of interest earned on our cash, cash equivalents and investments. See “—Liquidity and Capital Resources” below and

Note 10 to our condensed consolidated financial statements included in this report for further discussion. Foreign exchange gains and losses are primarily due to the remeasurement of our lease liabilities, which are denominated in a foreign currency and held by a subsidiary with a U.S. dollar functional currency. Also included in other income and expense are changes in the fair value of equity securities.

Critical Accounting Policies and Use of Estimates

Our management's discussion and analysis of financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP"). The preparation of consolidated financial statements also requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, costs and expenses and related disclosures. We evaluate our estimates and judgments on an ongoing basis. Significant estimates include assumptions used in the determination of revenue recognition, leases, acquisitions, stock-based compensation and fair value measurements. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Our critical accounting policies and significant estimates have not materially changed since the date we filed our 2020 Form 10-K. For more information on our critical accounting policies and estimates, refer to our 2020 Form 10-K.

Results of Operations

Comparison of the Three Months Ended March 31, 2021 and 2020

The following table summarizes the results of our operations for the three months ended March 31, 2021 and 2020:

	THREE MONTHS ENDED MARCH 31,			
	2021	2020	CHANGE	% CHANGE
	(in thousands, except percentages)			
Product revenues, net	$ 22,970	$ 20,341	$ 2,629	13 %
Total revenues, net	22,970	20,341	2,629	13 %
Costs and expenses:				
Cost of goods sold	6,700	6,092	608	10 %
Selling, general and administrative expenses	32,598	36,902	(4,304)	(12)%
Pre-approval commercial manufacturing	—	2,114	(2,114)	(100)%
Research and development expenses	17,891	19,173	(1,282)	(7)%
Total costs and expenses	57,189	64,281	(7,092)	(11)%
Loss from operations	(34,219)	(43,940)	9,721	(22)%
Other (expense) income, net	(7,714)	(5,222)	(2,492)	48 %
Loss before income taxes	$ (41,933)	$ (49,162)	$ 7,229	(15)%

Product revenues, net

Product revenues, net were $23.0 million and $20.3 million for the three months ended March 31, 2021 and 2020, respectively, and related to our U.S glaucoma franchise products, Rhopressa® or Rocklatan®. The year-over-year revenue increase is primarily attributable to higher volumes despite overall glaucoma market declines during the period. Net sales per unit remained relatively consistent in the first quarters of 2020 and 2021. The impacts of the COVID-19 pandemic did not significantly change between the first quarter of 2021 as compared to the fourth quarter of 2020 in terms of doctor offices reopening and patient volumes in ophthalmology offices. We experienced lower sequential volumes in the first quarter of 2021 as the first quarter is typically the weakest quarter for our glaucoma franchise products, as seen with several other pharmaceutical products, largely due to patient insurance deductibles. The volumes for the first quarter of 2021 were also affected by inclement weather impacting the central region of the United States. To the extent that the impact of the COVID-19 pandemic on the pharmaceutical industry is mitigated, we would expect volumes to increase for the remainder of 2021.

Cost of goods sold

Cost of goods sold was $6.7 million for the three months ended March 31, 2021, compared to $6.1 million in the prior year period. Our gross margin percentage was 70.8% and 70.1% for the three months ended March 31, 2021 and 2020, respectively. Our cost of goods sold and gross margin percentage for the three months ended March 31, 2021 and 2020 were unfavorably impacted by idle capacity costs due to underutilization at the Athlone manufacturing plant which increased the cost of goods sold by $4.4 million and $3.5 million and lowered the gross margin percentage by 19.0% and 17.3%, respectively. Our cost of goods sold and gross margin percentage for the three months ended March 31, 2020 were also unfavorably impacted by inventory write-offs, which increased the cost of goods sold by $1.5 million and lowered the gross margin percentage by 7.3%. We expect the underutilization to continue to have an unfavorable impact on cost of goods sold that will decrease over time as the manufacturing plant reaches full capacity. We received FDA approval to produce Rocklatan® and Rhopressa® in January 2020 and September 2020, respectively, at the Athlone manufacturing plant for commercial distribution in the United States. Prior to this approval, costs incurred for commercial-related manufacturing activities for both products were recorded to pre-approval commercial manufacturing expenses.

Selling, general and administrative expenses

Selling, general and administrative expenses decreased by $4.3 million for the three months ended March 31, 2021 as compared to the three months ended March 31, 2020, primarily due to lower sales and marketing expenses as well as lower travel expenses as a result of COVID-19 related travel restrictions. To the extent the impact of the COVID-19 pandemic on the pharmaceutical industry is mitigated, we expect an increase of selling, general and administrative expenses to pre-COVID-19 levels, primarily due to an increase of sales and marketing expenses as well as travel expenses.

Pre-approval commercial manufacturing expenses

Pre-approval commercial manufacturing expenses were zero and $2.1 million for the three months ended March 31, 2021 and 2020, respectively. We received regulatory approval in January 2020 and September 2020 to produce Rocklatan® and Rhopressa®, respectively, at our Athlone manufacturing plant. The cost of Rocklatan® and Rhopressa® produced by the Athlone manufacturing plant for commercial distribution following regulatory approval was capitalized as inventory or expensed to cost of goods sold. Further, we received regulatory approval for our additional Rocklatan® drug product contract manufacturer, which began to supply commercial product in the first quarter of 2020. The cost of commercial Rocklatan® produced by the additional contract manufacturer following regulatory approval was capitalized as inventory. We do not expect any pre-approval commercial manufacturing expenses for the remainder of 2021.

Research and development expenses

Research and development expenses decreased by $1.3 million for the three months ended March 31, 2021 as compared to the three months ended March 31, 2020.

A significant part of our program spend in the three months ended March 31, 2021 related to the AR-15512 Phase 2b clinical trial which increased expenses by $3.2 million as compared to the three months ended March 31, 2020.

Furthermore, expenses for Rhopressa® in the three months ended March 31, 2021 consisted of ongoing costs for Rhopressa® Phase 3 clinical trial in Japan. Santen’s portion of shared costs related to conducting the first Rhopressa® Phase 3 clinical trial in Japan were recorded as deferred revenue, non-current on the condensed consolidated balance sheets.

These increases were offset by a decrease of $1.9 million related to the timing of the development of our retina programs and a decline of $1.2 million in expenses associated with Rocklatan®, due to lower costs related to the Mercury 3 registration trial in Europe. In addition, travel expenses were lower as a result of COVID-19 related travel restrictions.

Other (expense) income, net

Other (expense) income, net consists of the following:

	THREE MONTHS ENDED MARCH 31,		
	2021	2020	CHANGE
	(in thousands)		
Interest income	$ 51	$ 1,096	$ (1,045)
Interest expense	(6,901)	(6,375)	(526)
Other (expense) income	(864)	57	(921)
Other (expense) income, net	$ (7,714)	$ (5,222)	$ (2,492)

Other (expense) income, net changed by $2.5 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020.

This change was primarily due to a decrease of $1.0 million in interest income on our cash, cash equivalents and investments and a change of $0.9 million in other (expense) income during the three months ended March 31, 2021 as compared to the three months ended March 31, 2020. The change in other (expense) income primarily consists of $1.0 million in realized loss on equity securities sold at the end of the period.

Further, interest expense, which decreased by $0.5 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020, relates to interest expense under the Convertible Notes issued in September 2019, including the amortization of debt discounts and issuance costs incurred.

Liquidity and Capital Resources

Since our inception, we have funded operations primarily through the sale of equity securities and the issuance of convertible notes. In addition, we generate cash flow from product revenues related to sales of our glaucoma franchise products, Rhopressa® and Rocklatan®, in the United States. Further, we entered into the Santen Agreement, pursuant to which Santen paid a $50.0 million upfront payment to Aerie Ireland Limited (the "Upfront Payment").

We have incurred losses and experienced negative operating cash flows since our inception and anticipate that we will continue to incur losses until such a time when our current products and any future products, if commercialized, generate adequate revenues to render us profitable. We will not generate any revenue from any product candidates or future product candidates unless and until we obtain regulatory approval and commercialize such products.

Sources of Liquidity

Our product revenue, net amounted to $23.0 million for the three months ended March 31, 2021, which relate to sales of our glaucoma franchise products, Rhopressa® and Rocklatan®. Accounts receivable, net amounted to $46.2 million as of March 31, 2021.

As of March 31, 2021, our principal sources of liquidity were our cash, cash equivalents and investments, which totaled approximately $208.2 million. In September 2019, we issued an aggregate principal amount of $316.25 million of Convertible Notes. See Note 10 to our condensed consolidated financial statements included in this report for additional information. Further, in October 2020, we entered into the Santen Agreement. Pursuant to the Santen Agreement, Santen paid the $50.0 million Upfront Payment in the fourth quarter of 2020. See Note 3 to our condensed consolidated financial statements included in this report for additional information. We believe that our cash, cash equivalents and investments and projected cash flows from revenues will provide sufficient resources for our current ongoing needs through at least the next twelve months. See "—*Operating Capital Requirements*."

Cash Flows

The following table summarizes our sources and uses of cash:

	THREE MONTHS ENDED MARCH 31,	
	2021	2020
	(in thousands)	
Net cash (used in) provided by:		
Operating activities	$ (30,054)	$ (41,822)
Investing activities	2,280	33,483
Financing activities	(1,101)	(1,422)
Net change in cash and cash equivalents	$ (28,875)	$ (9,761)

Operating Activities

During the three months ended March 31, 2021, net cash used in operating activities of $30.1 million related to a net loss of $42.0 million, adjusted for non-cash items of $18.8 million primarily related to stock-based compensation expense, amortization and accretion and depreciation, partially offset by a net cash outflow of $6.9 million related to changes in operating assets and liabilities. During the three months March 31, 2020, net cash used in operating activities of $41.8 million related to a net loss of $49.1 million, adjusted for non-cash items of $18.7 million primarily related to stock-based compensation expense, amortization and accretion, depreciation, offset by a net cash outflow of $11.4 million related to changes in operating assets and liabilities.

The decrease in net cash used in operating activities during the three months ended March 31, 2021 as compared to the three months March 31, 2020 was primarily due to higher net cash collections generated from product revenues and lower sales and marketing spend.

Investing Activities

During the three months ended March 31, 2021, our investing activities provided net cash of $2.3 million related to sales and maturities of available-for-sale investments of $28.3 million offset by purchases of available-for-sale investments of $25.2 million and purchases of property, plant and equipment of $0.8 million primarily related to the manufacturing plant in Athlone, Ireland. During the three months ended March 31, 2020, our investing activities provided net cash of approximately $33.5 million related to sales and maturities of available-for-sale investments of $50.6 million offset by purchases of available-for-sale investments of $15.8 million and purchases of property, plant and equipment of $1.2 million primarily related to the manufacturing plant in Athlone, Ireland.

Financing Activities

During the three months ended March 31, 2021, our financing activities used net cash of $1.1 million. The net cash used in financing activities of $1.1 million for three months ended March 31, 2021 was primarily related to tax payments made on employees' behalf through withholding of shares on restricted stock grants. During the three months ended March 31, 2020 our financing activities used net cash of $1.4 million. The net cash used in financing activities of $1.4 million for the three months ended March 31, 2020 was primarily related to tax payments made on employees' behalf through withholding of shares on restricted stock grants.

Operating Capital Requirements

We expect to incur ongoing operating losses until such a time when Rhopressa®, Rocklatan®, Rhokiinsa® or Roclanda® or any product candidates or future product candidates, if approved, generate sufficient cash flows for Aerie to achieve profitability.

Our principal liquidity requirements are for: working capital; operating expenses, including for commercialization and manufacturing activities; expenses associated with developing our pipeline opportunities, including pursuing strategic growth opportunities; costs associated with executing our global expansion strategy, including clinical and potential commercialization activities outside the United States; contractual obligations; and capital expenditures.

We believe that our cash, cash equivalents and investments and projected cash flows from revenues, will provide sufficient resources to support our operations, including interest payments for our Convertible Notes, through at least the next twelve months.

Our future funding requirements will depend on many factors, including, but not limited to the following:

- commercial performance of Rhopressa® and Rocklatan® or any current or future product candidates, if approved, including any effects associated with the COVID-19 pandemic;
- costs of commercialization activities for Rhopressa® and Rocklatan® and any current or future product candidates, if approved;
- costs of building inventory to support sales growth and other associated working capital needs;
- costs, timing and outcome of seeking regulatory approval;
- timing and costs of our ongoing and future clinical trials and preclinical studies including those related to our global expansion;
- costs of any follow-on development or products, including the exploration and/or development of any additional indications or additional opportunities for new ophthalmic product candidates, delivery alternatives and new therapeutic areas;
- terms and timing of any acquisitions, collaborations, or other arrangements;
- costs related to the Convertible Notes; and
- costs related to filing and prosecuting patent applications, maintaining and protecting our intellectual property rights and defending against intellectual property related claims.

We based our projections on assumptions that may prove to be incorrect or unreliable or may change due to circumstances beyond our control, and as a result, we may consume our available capital resources earlier than we originally projected. Accordingly, we may be required to obtain further funding through debt or equity offerings or other sources. If such funding is required, we cannot guarantee that it will be available to us on favorable terms, if at all.

Outstanding Indebtedness

In September 2019, we issued an aggregate principal amount of $316.25 million of Convertible Notes.

The Convertible Notes are senior, unsecured obligations with interest payable semi-annually in cash in arrears at a rate of 1.50% per annum on April 1 and October 1 of each year, which began on April 1, 2020. The Convertible Notes will mature on October 1, 2024 unless they are redeemed, repurchased or converted prior to such date. Prior to April 1, 2024, the Convertible Notes will be convertible at the option of holders only during certain periods and upon satisfaction of certain conditions. On and after April 1, 2024, the Convertible Notes will be convertible at the option of the holders any time until the close of business on the second scheduled trading day immediately preceding the maturity date. Upon conversion, the Convertible Notes may be settled in shares of our common stock, cash or a combination, thereof, at our election. We currently intend to settle the principal and interest amounts of the Convertible Notes in cash.

See Note 10 to our condensed consolidated financial statements included in this report for additional information.

Contractual Obligations and Commitments

There have been no material changes to our contractual obligations and commitments as included in our 2020 Form 10-K.

Off-Balance Sheet Arrangements

None.

Recent Accounting Pronouncements

For a discussion of recently issued accounting standards, see Note 2 to our condensed consolidated financial statements included in this report.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

We have market risk exposure to interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. Our cash, cash equivalents and investments totaled $208.2 million and $240.4 million as of March 31, 2021 and December 31, 2020, respectively. Given the short-term nature of our cash, cash equivalents and investments, we do not believe that a change in market interest rates would have a material impact on our financial condition or results of operations. We do not currently engage in any hedging activities against changes in interest rates.

We face market risks attributable to fluctuations in foreign currency exchange rates and exposure on the remeasurement of foreign currency-denominated monetary assets or liabilities into U.S. dollars. In particular, our operations and subsidiary in Ireland may enter into certain obligations or transactions in Euros or other foreign currencies but has a U.S. dollar functional currency. We do not currently have a foreign currency hedging program. To date and during the three months ended March 31, 2021, foreign currency exposure and foreign currency financial instruments have not been material.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15(d)-15(e)), as of the end of the period covered by this report. Based upon the evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of March 31, 2021, the disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in the reports we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended March 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We may periodically become subject to legal proceedings and claims arising in connection with our business. We are not a party to any known litigation, are not aware of any material unasserted claims and do not have contingency reserves established for any litigation liabilities.

Item 1A. Risk Factors

You should consider carefully the risks set forth under “Risk Factors” in our 2020 Form 10-K, and other documents that we have filed or furnished with the SEC. Except as set forth below, there have been no material changes to these risk factors.

Healthcare law and policy changes may negatively impact our business, including by decreasing the prices that we and our collaborators receive for our products.

In recent years, the United States has enacted or proposed legislative and regulatory actions and executive orders affecting the healthcare system that may impact our ability to profitably sell any product for which we obtain marketing approval. For example, the federal government has implemented reforms to government healthcare programs in the United States, including changes to the methods for, and amounts of, Medicare reimbursement and changes to the Medicaid Drug Rebate Program. The implementation of certain of these policy changes has decreased our revenues and increased our costs, and federal and state legislatures, health agencies and third-party payers continue to focus on containing the cost of prescription drugs. Further legislative and regulatory changes, and increasing pressure from social sources, are likely to further influence the manner in which our products are priced, reimbursed, prescribed and purchased.

The Trump administration put forth a number of proposals aimed at containing prescription drug prices and announced several Executive Orders that sought to implement a number of the administration's proposals. For example, on November 20, 2020, the United States Department of Health and Human Services finalized a regulation removing safe harbor protection under the Federal Anti-Kickback Statute for price reductions from pharmaceutical manufacturers to plan sponsors under Part D, either directly or through pharmacy benefit managers, unless the price reduction is required by law or unless it is passed through to the dispensing pharmacy and reflected in the price to the patient. The implementation of the rule has been delayed by the Biden administration to January 1, 2023 in response to ongoing litigation. Further, in November 2020, the Centers for Medicare & Medicaid Services issued an interim final rule implementing the Trump administration's Most Favored Nation Executive Order, which would tie Medicare Part B payments for certain physician-administered drugs to the lowest price paid in other economically advanced countries. While the implementation of the interim final rule is currently enjoined, the Biden administration and Congress are expected to propose policies intended to reduce the prices of prescription drugs. Also, in the current climate, price increases on our products and negative publicity regarding drug pricing and price increases generally could negatively affect market acceptance, and sales, of our products and product candidates.

Also, some states have enacted or are considering legislation and ballot initiatives that would control the prices and coverage and reimbursement levels of drugs, including laws to allow importation of pharmaceutical products from lower cost jurisdictions outside the United States and laws intended to impose price controls on state drug purchases.

In addition, governments in countries outside the United States control the costs of pharmaceuticals. Many European countries and Canada have established pricing and reimbursement policies that contain costs by referencing the price of the same or similar products in other countries. In these instances, if coverage or the level of reimbursement is reduced, limited or eliminated in one or more countries, we may be unable to obtain or maintain anticipated pricing or reimbursement in other countries or in new markets. This may influence our decision whether to sell a product in one or more countries, thus adversely affecting our geographic expansion plans. It is also possible that governments may take additional action to reform the healthcare system in response to the evolving effects of the coronavirus pandemic.

Healthcare reforms that have been adopted, and that may be adopted in the future, could result in further reductions in coverage and levels of reimbursement for our products, increases in the rebates payable under U.S. government rebate programs and additional downward pressure on the prices that we and our collaborators receive for our products. We cannot be certain as to the ultimate content, timing, or effect of future healthcare law and policy changes, nor is it possible at this time to estimate the impact of any such potential changes; however, such changes or the ultimate impact of changes could materially and adversely affect our revenue or sales of our current and or potential future products and product candidates, as well as those of our collaborators.

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

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

None.

Item 5. Other Information

None.

Item 6. Exhibits

31.1*	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended.
31.2*	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended.
32.1**	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS***	XBRL Instance Document.
101.SCH***	XBRL Taxonomy Extension Schema Document.
101.CAL***	XBRL Taxonomy Extension Calculation Linkbase Document.
101.LAB***	XBRL Taxonomy Extension Label Linkbase Database.
101.PRE***	XBRL Taxonomy Extension Presentation Linkbase Document.
101.DEF***	XBRL Taxonomy Extension Definition Linkbase Document.
104***	Cover Page Interactive Data File

* Filed herewith.

** Furnished herewith.

*** Attached as Exhibit 101 to this report are the following formatted in XBRL (Extensible Business Reporting Language):

(i) Condensed Consolidated Balance Sheets at March 31, 2021 and December 31, 2020 (unaudited), (ii) Condensed Consolidated Statements of Operations and Comprehensive Loss for the three months ended March 31, 2021 and 2020 (unaudited), (iii) Condensed Consolidated Statements of Stockholders' Equity for the three months ended March 31, 2021 and 2020 (unaudited), (iv) Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2021 and 2020 (unaudited) and (v) Notes to Condensed Consolidated Financial Statements (unaudited).

SIGNATURES

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

AERIE PHARMACEUTICALS, INC.

Date: May 6, 2021

/s/ RICHARD J. RUBINO
Richard J. Rubino
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 31.1

CERTIFICATION

I, Vicente Anido, Jr., Ph.D., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Aerie Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 6, 2021

/s/ VICENTE ANIDO, JR., PH.D.

Vicente Anido, Jr., Ph.D.
Chief Executive Officer, Chairman of the Board
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION

I, Richard J. Rubino, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Aerie Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 6, 2021

/s/ RICHARD J. RUBINO

Richard J. Rubino
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the filing of the Quarterly Report on Form 10-Q of Aerie Pharmaceuticals, Inc., a Delaware corporation (the "Company"), for the period ended March 31, 2021 (the "Report"), the undersigned, Vicente Anido, Jr., Ph.D., Chief Executive Officer and Chairman of the Board of the Company, hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

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

Date: May 6, 2021

/s/ VICENTE ANIDO, JR., PH.D.
Vicente Anido, Jr., Ph.D.
Chief Executive Officer, Chairman of the Board
(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the filing of the Quarterly Report on Form 10-Q of Aerie Pharmaceuticals, Inc., a Delaware corporation (the "Company"), for the period ended March 31, 2021 (the "Report"), the undersigned, Richard J. Rubino, Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

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

Date: May 6, 2021

/s/ RICHARD J. RUBINO
Richard J. Rubino
Chief Financial Officer
(Principal Financial and Accounting Officer)