

## PROSPECTUS

**APREA THERAPEUTICS, INC.****74,349,426 Shares of Common Stock**

This prospectus relates to the possible resale, from time to time, by the selling stockholders identified in this prospectus of up to (i) 37,174,713 shares of our common stock, par value \$0.001 per share (the “Common Stock”) underlying pre-funded warrants initially issued in a private placement on March 31, 2026 (the “Private Placement”) and (ii) 37,174,713 shares of Common Stock underlying common stock purchase warrants issued in the Private Placement.

The selling stockholders may offer the shares from time to time as each selling stockholder may determine through public or private transactions or through other means described in the section entitled “Plan of Distribution” or a supplement to this prospectus. Each selling stockholder may also sell shares under Rule 144 under the Securities Act of 1933, as amended, if available, rather than under this prospectus.

The registration of these shares does not necessarily mean that any holders will sell any of their shares or exercise their warrants. We are not offering for sale any shares of our Common Stock pursuant to this prospectus. We will not receive any proceeds from the sale of these shares. We will, however, receive cash proceeds equal to the total exercise price of warrants that are exercised for cash.

Our common stock is listed on the Nasdaq Capital Market under the symbol “APRE.” On April 28, 2026, the last reported sale price of our common stock was \$0.8369.

**Investing in our securities involves significant risks. We strongly recommend that you read carefully the risks we describe in this prospectus and in any accompanying prospectus supplement, as well as the risk factors that are incorporated by reference into this prospectus from our filings made with the Securities and Exchange Commission. See “Risk Factors” on page 5 of this prospectus.**

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

The date of this prospectus is April 29, 2026

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You should rely only on the information contained in or incorporated by reference in this prospectus. We have not authorized anyone to provide you with different or additional information. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in this prospectus or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of common stock. Our business, financial condition, results of operations and prospects may have changed materially since such date.

The terms “Aprea,” the “Company,” “our,” “us” and “we,” as used in this prospectus, refer to Aprea Therapeutics, Inc., unless we state otherwise or the context indicates otherwise.

## PROSPECTUS SUMMARY

### PROSPECTUS SUMMARY

*The following summary highlights information contained elsewhere in this prospectus. It may not contain all of the information that is important to you. You should read the entire prospectus carefully, especially the discussion regarding the risks of investing in our securities under the heading “Risk Factors,” before investing in our securities. All references to “Company” “we,” “our” or “us” refer solely to Aprea Therapeutics, Inc. and its subsidiaries and not to the persons who manage us or sit on our Board of Directors.*

#### Overview

We are a clinical-stage precision medicine oncology company focused on the discovery and development of targeted therapies for patients with biomarker-defined cancers. Our approach focuses on matching treatments to specific cancer-related genetic mutations to potentially maximize effectiveness and minimize side effects. Specifically, we develop small molecule inhibitors designed to exploit genetic mutations in cancer to widen the therapeutic window and intended to make treatments more effective at destroying cancer cells while sparing healthy tissue. We have assembled a team with extensive experience in the discovery, development, and commercialization of oncology drugs to support our mission of developing novel synthetic lethality-based cancer therapeutics.

Aprea Therapeutics AB was originally incorporated in 2002 and commenced principal operations in 2006. On September 20, 2019, we consummated a reorganization, pursuant to which all of the issued and outstanding stock and options of Aprea Therapeutics AB were exchanged for common stock, preferred stock or options, as applicable, of Aprea Therapeutics, Inc. As a result, Aprea Therapeutics AB became a wholly-owned subsidiary of Aprea Therapeutics, Inc.

Prior to our acquisition of Atrin Pharmaceuticals Inc. (“Atrin”) in May 2022, we were engaged in the clinical development of cancer therapeutics that related to the mutant p53 tumor suppressor protein. Following our acquisition of Atrin, we enhanced our pipeline and shifted the focus of our activities to the assets acquired from Atrin and those developed in house.

We believe that precision medicine has the potential to impact patients’ lives in a wide range of cancer types. Genomic instability is the hallmark of cancer. When a gene pathway is damaged or fails, related genes make up for its loss of function. Our approach is to inhibit these make up genes, thereby specifically killing cancer cells with defined mutations. This approach is called synthetic lethality. Using synthetic lethality, our product candidates are designed to selectively kill cancer cells while minimizing the effect on normal, unmutated cells, decreasing the toxicity usually associated with cancer treatment. We aspire to become a leader in this emerging field and are establishing a pipeline of clinical and preclinical programs that we believe may have broad applications to cancer treatment.

#### WEE1 Inhibitor: APR-1051

In this program, we are targeting WEE1, a kinase that is a key regulator of multiple phases of the cell cycle. Our lead WEE1 inhibitor product candidate is APR-1051. In March 2024, our investigational new drug (“IND”) application for APR-1051 (IND 169359) went into effect and in the second quarter of 2024 we enrolled the first patient into ACESOT-1051, our Phase 1 dose escalation study. A total of 9 cohorts are planned for ACESOT-1051 that will evaluate doses of 10 mg to 300 mg once daily. As of March 2, 2026, we are enrolling cohort 8 for ACESOT-1051 to evaluate a dose of 220 mg once daily. Preliminary results provide early clinical proof-of-concept of APR-1051. A potential dose-response trend was observed, with increasing single-agent activity across the 70 mg, 100 mg, 150 mg and 220 mg cohorts. On January 29, 2026, we announced the first unconfirmed partial response (uPR) observed in a patient enrolled in the ongoing Phase 1 ACESOT-1051 dose-escalation study: a patient with PPP2R1A-mutated uterine serous carcinoma, a form of endometrial cancer, treated at the 150 mg dose level of APR-1051. At the protocol-defined 8-week first imaging assessment, the patient achieved a 50% reduction in target lesion size per RECIST v1.1 criteria, along with a marked reduction in cancer antigen 125 (CA-125) levels, from 732 to 70 U/mL. CA-125 is a well-recognized tumor marker in endometrial cancer. On February 18, 2026, we announced the second uPR observed in a patient with PPP2R1A-mutated endometrial cancer, treated at the 220 mg dose level: at the

first imaging assessment the patient achieved a 50% reduction in target lesion size, along with a marked decline in CA-125 from 362 at baseline to 47 U/mL, further supporting the anti-tumor activity of APR-1051. This response was subsequently confirmed at the second image assessment, with an additional 9.5% reduction in target lesion size, and a reduction in CA-125 to 40.2U/ml (from 362 U/mL at baseline). In addition, preliminary results from the ACESOT-1051 study indicate that APR-1051 has been safe and well-tolerated to date, supporting our development strategy to differentiate WEE1 inhibition through a potentially improved therapeutic index. Low therapeutic index has been a major hurdle in the development of WEE1 inhibitors. Active enrollment is ongoing at three sites in the U.S. (NCT06260514) with additional sites planned. We anticipate additional open-label safety/efficacy data to be available in the second quarter of 2026. We expect to complete dose-escalation in the third quarter of 2026.

*ATR Inhibitor: ATRN-119 (Mosipasertib)*

Our second clinical-stage synthetic lethality product candidate is ATRN-119, an oral small molecule inhibitor of ataxia telangiectasia and Rad3-related, or ATR. The ATR kinase is a master regulator of the DNA damage response, with key roles in cell cycle control and DNA repair following replication stress. We have developed ATRN-119, the first oral macrocyclic ATR inhibitor to enter clinical trials. On October 15, 2025, we announced that we had determined the recommended Phase 2 dose (RP2D) of 1,100 mg once daily for ATRN-119 in the ABOYA-119 Phase 1/2a dose-escalation study, in patients with advanced solid tumors. Building on the completion of dose escalation, we are considering further ATRN-119 development in combination approaches that could expand its therapeutic potential. We believe ATRN-119's mechanism of action, favorable safety profile, and pharmacologic characteristics make it an ideal candidate for combination with other anti-cancer therapies, including radiation therapy, antibody-drug conjugates (ADCs) and immune checkpoint inhibitors. We are currently in discussions with leading academic centers to explore combining ATRN-119 with radiation in patients with human papillomavirus — positive (HPV+) head and neck cancer. Additional investigator-led studies evaluating ATRN-119 in combination with an I/O agent and ADCs are also being explored. As part of this strategic focus, we have paused further enrollment in both once daily and twice daily monotherapy dosing arms of ABOYA-119 and started an orderly wind-down of certain clinical trial site activities associated with the monotherapy arms as we explore ATRN-119 in potential combination approaches.

*P53 Reactivator: APR-246 (eprenetapopt)*

We do not currently have any ongoing clinical trials involving our reactivator of mutant p53, which we were previously engaged in prior to our acquisition of Atrin.

*DYRK1 Inhibitor: APR-1602*

We also have an early-stage program, APR-1602, a macrocyclic DYRK1A/B inhibitor, that will be ready to enter IND-enabling studies in the fourth quarter of 2026.

**Implications of Being a Smaller Reporting Company**

We are a “smaller reporting company” as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as our voting and non-voting common stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than \$100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

**Corporate Information**

Our principal executive offices are located at 3805 Old Easton Road, Doylestown, Pennsylvania 18902, and our telephone number is (215) 948-4119. Our website address is [www.aprea.com](http://www.aprea.com). The information contained on or accessible through our website is not incorporated by reference into this prospectus, and you

should not consider any information contained on, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase our common stock.

Our filings with the SEC are posted on our website at [www.aprea.com](http://www.aprea.com). Other than the specifically incorporated SEC filings, the information found on or accessible through our website is not part of this or any other report we file with or furnish to the SEC. The public can also obtain copies of these filings by accessing the SEC's website at <http://www.sec.gov>.

**THE OFFERING**

We are registering for resale by the selling stockholders named herein an aggregate of 74,349,426 shares of our Common Stock as described below.

Securities being offered:	Up to (i) 37,174,713 shares of our common stock, par value \$0.001 per share (the “Common Stock”), underlying pre-funded warrants, initially issued in a private placement on March 31, 2026 (the “Private Placement”), and (ii) 37,174,713 shares of Common Stock underlying common stock purchase warrants issued in the Private Placement.
Use of proceeds:	We will not receive any of the proceeds from the sale or other disposition of shares of our Common Stock by the selling stockholders. We may receive proceeds upon any exercise for cash of outstanding warrants, in which case such proceeds will be used for clinical trials, for working capital and other general corporate purposes. See “Use of Proceeds” on page 11.
Market for common stock:	Our Common Stock is listed on The Nasdaq Capital Market under the symbol “APRE.” On April 28, 2026, the last reported sale price of our Common Stock on The Nasdaq Capital Market was \$0.8369. The warrants issued in the Private Placement are not listed on Nasdaq, any national securities exchange or any other nationally recognized trading system.
Risk Factors	Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 7 of this prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus, for a discussion of information that should be considered in connection with an investment in our securities.

## RISK FACTORS

*Investing in our securities involves risk. You should carefully consider the specific risks discussed or incorporated by reference into the applicable prospectus supplement, together with all the other information contained in the prospectus or incorporated by reference into this prospectus and the applicable prospectus supplement. You should also consider the risks, uncertainties and assumptions discussed under the caption "Risk Factors" included in our [Annual Report on Form 10-K for the year ended December 31, 2025](#), and in subsequent filings, which are incorporated by reference into this prospectus. These risk factors may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future or by a prospectus supplement relating to a particular offering of our securities. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described in our SEC filings or any prospectus supplement or any additional risks and uncertainties actually occur, our business, financial condition and results of operations could be materially and adversely affected. In that case, the trading price of our securities could decline and you might lose all or part of your investment.*

***A sale of a substantial number of shares of common stock by the selling stockholders could cause the price of our common stock to decline.***

Following the effectiveness of the registration statement of which this prospectus forms a part, the securities that may be resold by the selling stockholders pursuant to this prospectus may be sold by the selling stockholders in the public market without restriction. If the selling stockholders sell, or the market perceives that the selling stockholders intend to sell for various reasons, substantial amounts of such securities in the public market, the price of our Common Stock may decline. Additionally, such conditions may make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem reasonable or appropriate.

## FORWARD-LOOKING STATEMENTS

This prospectus includes and incorporates by reference “forward-looking statements” within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and releases issued by the SEC and within the meaning of Section 27A of the Securities Act, and Section 21E of the Exchange Act. All statements other than statements of historical fact are “forward-looking statements” for purposes of this prospectus. In some cases, you can identify forward-looking statements by terminology such as “may,” “could,” “will,” “would,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “intend,” “predict,” “seek,” “contemplate,” “project,” “continue,” “potential,” “ongoing,” “goal,” or the negative of these terms or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

- estimates of our expenses, capital requirements and our needs for additional financing;
- business interruptions, including delays in enrollment, patient follow-up and data collection of clinical trials;
- the prospects of our product candidates, all of which are still in development;
- outcome and results of ongoing or future preclinical studies and clinical trials of our product candidates;
- our expectations regarding our ability to identify, discover or acquire additional suitable product candidates;
- the design of our ongoing and planned clinical trials, including the sample size, trial duration, endpoint definition, event rate assumptions and eligibility criteria;
- our understanding of product candidates mechanisms of action and interpretation of preclinical and early clinical results from clinical development programs and our ability to predict clinical outcomes based on such preclinical and early clinical results;
- our ability to enroll patients in clinical trials, to timely and successfully complete those trials and to receive necessary regulatory approvals;
- our expectations regarding the timing of initiation of data readout from our clinical trials;
- market acceptance or commercial success of any product candidate we develop and the degree of acceptance among physicians, patients, patient advocacy groups, healthcare payors and the medical community;
- our expectations regarding competition, potential market size, the size of the patient populations for our product candidates, if approved for commercial use, and market acceptance;
- our ability to obtain regulatory approval of our product candidates, and any restrictions, limitations and/or warnings in their labels, if approved;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates;
- potential claims relating to our intellectual property and third-party intellectual property;
- the duration of our intellectual property estate that will provide protection for our product candidates;
- developments relating to our competitors and our industry;
- our sales, marketing or distribution capabilities and our ability to commercialize our product candidates, if we obtain regulatory approval;
- current and future agreements with third parties in connection with conducting clinical trials, as well as the manufacturing of our product candidates;
- our expectations regarding the ability of our current contract manufacturing partners to produce our product candidates in the quantities and timeframe that we will require;
- our expectations regarding our future costs of goods;

- our ability to attract, retain and motivate key personnel and increase the size of our organization;
- our ability to establish collaborations in lieu of obtaining additional financing;
- the impact of government laws and regulations;
- our financial performance; and
- our expectations regarding the time during which we will be a smaller reporting company under the Exchange Act.

These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. In evaluating such forward-looking statements, you should specifically consider various factors that may cause actual results to differ materially from current expectations, including the risks outlined under the heading “Risk Factors” contained in this prospectus and any related free writing prospectus, and in any other documents incorporated herein or therein. Any forward-looking statement in this prospectus reflects our current view with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, industry and future growth. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

This prospectus and the documents incorporated by reference, may also contain estimates, projections and other information concerning our industry, our business and the markets for certain drugs, including data regarding the estimated size of those markets, their projected growth rates and the incidence of certain medical conditions. Information that is based on estimates, forecasts, projections or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained these industry, business, market and other data from reports, research surveys, studies and similar data prepared by third parties, industry, medical and general publications, government data and similar sources. In some cases, we do not expressly refer to the sources from which these data are derived.

## USE OF PROCEEDS

We will receive no proceeds from the sale of shares of Common Stock by the selling stockholders.

The shares of Common Stock covered by this prospectus are issuable upon exercise of warrants issued to the selling stockholders. The exercise price of the outstanding warrants is \$0.683 per share with respect to the common stock purchase warrants and \$0.001 with respect to the pre-funded warrants. The exercise price and number of shares of Common Stock issuable upon exercise of the warrants may be adjusted in certain circumstances, including stock splits or dividends, mergers, or reclassifications or similar events. Upon any exercise of outstanding warrants, the applicable selling stockholders will pay us the exercise price.

To the extent we receive proceeds from the cash exercise of outstanding warrants, we intend to use the proceeds for general corporate purposes and for research and development expenses. We have not yet determined the amount of net proceeds to be used specifically for any of the foregoing purposes.

The amounts and timing of our actual expenditures will depend on numerous factors, including the progress of our clinical trials, as well as the amount of cash used in our operations. We may find it necessary or advisable to use the net proceeds for other purposes, and we will have broad discretion in the application of any net proceeds from warrant exercises.

Based upon our historical and anticipated future growth and our financial needs, we may engage in additional financings of a character and amount that we determine as the need arises. We may raise additional capital through additional public or private financings, strategic partnerships, the incurrence of debt and other available sources.

## SELLING STOCKHOLDERS

On March 30, 2026, we entered into a securities purchase agreement with certain institutional investors, pursuant to which we issued and sold to the investors (i) pre-funded Common Stock purchase warrants (the “Prefunded Warrants”) to purchase an aggregate of up to 37,174,713 shares of Common Stock at an exercise price of \$0.001 per share, and (ii) common warrants (the “Common Warrants”) to purchase up to 37,174,713 shares of Common Stock at an exercise price of \$0.683 per share. The closing of the Private Placement occurred on March 31, 2026 (the “Closing Date”). The Common Warrants will be exercisable until December 31, 2029 (the “Termination Date”); provided, however, that, if the holder exercises all or any portion of the holder’s Pre-Funded Warrant, then, with respect to each such exercise of the holder’s Pre-Funded Warrant, the Termination Date of the Common Warrant with respect to such number of warrant shares as correspond to the number of shares of Common Stock issued upon such exercise of such Pre-Funded Warrant by the holder shall be the thirtieth (30<sup>th</sup>) calendar day after the date upon which the holder exercises such Pre-Funded Warrant.

If a resale registration statement covering the shares of Common Stock underlying the Common Warrants is not effective and available at the time of exercise, the Common Warrants may be exercised by means of a “cashless” exercise formula. The Common Warrants may not be exercised to the extent that immediately following such exercise, the holder would beneficially own greater than 4.99% (or, at the election of the holder, greater than 9.99%) of the Company’s outstanding Common Stock. The Pre-Funded Warrants will be exercisable from the date of issuance until exercised in full and may not be exercised to the extent that immediately following such exercise, the holder would beneficially own greater than 4.99% (or, at the election of the holder, greater than 9.99%) of our outstanding common stock.

In connection with the Private Placement, we and the investors entered into a Registration Rights Agreement, dated March 30, 2026 (the “Registration Rights Agreement”), which required us to file a registration statement registering the resale of the securities issued in the Private Placement and issuable upon exercise of the warrants issued in the Private Placement on or prior to the 30th day after the Closing Date.

This prospectus relates to the resale of up to (i) 37,174,713 shares of Common Stock underlying pre-funded Common Stock purchase warrants, and (ii) 37,174,713 shares of Common Stock underlying Common Warrants, in each case issued in the Private Placement. We are registering the shares of Common Stock in order to permit the selling stockholders to offer the shares for resale from time to time.

The table below sets forth, to our knowledge, information concerning the beneficial ownership of shares of our common stock by the selling stockholders after the closing of the Private Placement as of March 31, 2026. The information in the table below with respect to the selling stockholders has been obtained from the selling stockholders. When we refer to the “selling stockholders” in this prospectus, we mean the selling stockholders listed in the table below as offering shares, as well as their respective transferees, pledgees or donees or other successors-in-interest. The selling stockholders may sell all, some or none of the shares of common stock subject to this prospectus. See “Plan of Distribution.”

Under the terms of the warrants, a selling stockholder may not exercise the warrants to the extent such exercise would cause such selling stockholder, together with its affiliates and attribution parties, to beneficially own a number of shares of Common Stock which would exceed 4.99% (or, at the election of such selling stockholder, 9.99%), of our then outstanding Common Stock following such exercise, excluding for purposes of such determination shares of Common Stock issuable upon exercise of such warrants which have not been exercised.

The number of shares of common stock beneficially owned prior to the offering for each selling stockholder includes (i) all shares of common stock held by such selling stockholder as of March 31, 2026, (ii) all shares as to which such selling stockholder has the right to acquire within 60 days of March 31, 2026, and (iii) all shares of common stock purchased by such selling stockholder in the Private Placement. The percentages of shares owned before and after the offering are based on 11,982,776 shares of common stock outstanding as of March 31, 2026. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed outstanding shares of common stock issuable upon the exercise of options and warrants held by that selling stockholder that are exercisable

within 60 days of March 31, 2026. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to shares. Unless otherwise indicated below, to our knowledge, each selling stockholder named in the table has sole voting and investment power with respect to the shares of common stock beneficially owned by it, except to the extent authority is shared by spouses under applicable law. The inclusion of any shares in this table does not constitute an admission of beneficial ownership for any selling stockholder named below.

Name of Selling Stockholder	Shares of Common Stock Beneficially Owned Prior to this Offering <sup>(1)</sup>		Maximum Number of shares of Common Stock to be Sold Pursuant to this Prospectus <sup>(2)</sup>	Shares of Common Stock to be Beneficially Owned After this Offering <sup>(3)</sup>	
	Number	Percentage		Number	Percentage
Soleus Capital Master Fund, L.P. <sup>(4)</sup>	1,329,940	9.99%	19,826,518	—	*
Soleus Private Equity Fund III, L.P. <sup>(5)</sup>	1,329,940	9.99%	4,956,628	—	*
Entities associated with Vestal Point Capital, LP <sup>(6)</sup>	1,329,940	9.99%	22,304,832	—	*
Squadron Master Fund LP <sup>(7)</sup>	1,329,940	9.99%	12,391,572	—	*
AIGH Investment Partners, LP <sup>(8)</sup>	1,329,940	9.99%	4,512,578	1,329,940	9.99%
WVP Emerging Manager Onshore Fund LLC – AIGH Series <sup>(9)</sup>	1,329,940	9.99%	1,683,208	1,329,940	9.99%
Lytton-Kambra Foundation <sup>(10)</sup>	950,016	7.53%	2,602,230	950,016	7.53%
3i, LP <sup>(11)</sup>	629,345	4.99%	2,478,314	629,345	4.99%
Lind Global Fund III LP <sup>(12)</sup>	629,345	4.99%	991,324	629,345	4.99%
The Hewlett Fund LP <sup>(13)</sup>	629,345	4.99%	991,324	629,345	4.99%
Bennu Pharma Fund, LP <sup>(14)</sup>	629,345	4.99%	1,239,156	—	*
Richard Peters. <sup>(15)</sup>	259,054	2.16%	247,830	11,224	*
John P. Hamill <sup>(16)</sup>	137,439	1.14%	61,956	75,483	*
Ze'ev Weiss <sup>(17)</sup>	115,258	*	61,956	53,302	*

\* Less than 1%

- (1) Includes shares of Common Stock issuable upon exercise of warrants issued in the Private Placement up to the beneficial ownership blocker of 4.99% or 9.99%, as applicable.
- (2) Includes shares of Common Stock issuable upon exercise of warrants issued in the Private Placement determined as if the outstanding warrants were exercised in full as of the trading day immediately preceding the date this registration statement was initially filed with the SEC, each as of the trading day immediately preceding the applicable date of determination and all subject to adjustment as provided in the registration right agreement, without regard to any limitations on the exercise of the warrants. Each of the pre-funded warrants and Common Warrants include a beneficial ownership blocker of 4.99% or 9.99%.
- (3) We do not know when or in what amounts a selling stockholder may offer shares for sale. The selling stockholders might not sell any or might sell all of the shares offered by this prospectus. Because the selling stockholders may offer all or some of the shares pursuant to this offering, and because there are currently no agreements, arrangements or understandings with respect to the sale of any of the shares, we cannot estimate the number of shares that will be held by the selling stockholders after completion of the offering. However, for purposes of this table, we have assumed that, after completion of the offering, none of the shares covered by this prospectus will be held by the selling stockholders.

- (4) Soleus Capital Master Fund, L.P. (“Soleus Master Fund”) holds (i) pre-funded warrants issued in the Private Placement to purchase up to 9,913,259 shares of common stock and (i) common warrants issued in the Private Placement to purchase up to 9,913,259 shares of common stock. Soleus Capital, LLC is the sole general partner of Soleus Master Fund; Soleus Capital Group, LLC (“SCG”) is the sole managing member of Soleus Capital, LLC; Soleus Capital Management, L.P. (“SCM”) is the investment manager for Soleus Master Fund; and Soleus GP, LLC is the sole general partner of SCM. Guy Levy is the sole managing member of each of SCG and Soleus GP, LLC. Each of Soleus Capital, LLC, SCG, SCM, Soleus GP, LLC and Mr. Levy disclaims beneficial ownership of the securities held by Soleus Master Fund, except to the extent of their pecuniary interest therein. The address for Soleus Master Fund is 100 Field Point Road, Suite 200, Greenwich, CT 06830.
- (5) Soleus Private Equity Fund III, L.P. (“Soleus PE Fund”) holds (i) pre-funded warrants issued in the Private Placement to purchase up to 2,478,314 shares of common stock and (i) common warrants issued in the Private Placement to purchase up to 2,478,314 shares of common stock. Soleus Private Equity GP III, LLC is the sole general partner of Soleus PE Fund, Soleus PE GP III, LLC is the sole manager of Soleus Private Equity GP III, LLC, SCM is the investment manager for Soleus PE Fund, and Soleus GP, LLC is the sole general partner of SCM. Guy Levy is the sole managing member of each of Soleus PE GP III, LLC and of Soleus GP, LLC. Each of Mr. Levy, Soleus PE GP III, LLC, Soleus Private Equity GP III, LLC, SCM and Soleus GP, LLC disclaims beneficial ownership of the securities held by Soleus PE Fund except to the extent of their pecuniary interest therein. The address for Soleus PE Fund is 100 Field Point Road, Suite 200, Greenwich, CT 06830.
- (6) Vestal Point Master Fund, LP holds (i) pre-funded warrants issued in the Private Placement to purchase up to 5,695,602 shares of common stock and (ii) common warrants issued in the Private Placement to purchase up to 5,695,602 shares of common stock. An account affiliated with Vestal Point Capital, LP holds (i) pre funded warrants issued in the Private Placement to purchase up to 5,456,814 shares of common stock and (ii) common warrants issued in the Private Placement to purchase up to 5,456,814 shares of common stock.
- (7) Squadron Master Fund LP holds (i) pre-funded warrants issued in the Private Placement to purchase up to 6,195,786 shares of common stock and (i) common warrants issued in the Private Placement to purchase up to 6,195,786 shares of common stock. The address for Squadron Master Fund LP is 999 Oakmont Plaza Dr., Suite 600, Westmont, IL 60559.
- (8) AIGH Investment Partners, LP holds (i) 915,244 shares of common stock, (ii) pre-funded warrants to purchase up to 990,486 shares of common stock, (iii) warrants to purchase up to 1,846,620 shares of common stock, (iv) pre-funded warrants issued in the Private Placement to up to purchase 2,256,289 shares of common stock and (v) common warrants issued in the Private Placement to purchase up to 2,256,289 shares of common stock. Mr. Orin Hirschman is the managing member of AIGH Capital Management, LLC, a Maryland limited liability company (“AIGH CM”), who is an advisor with respect to securities held by AIGH Investment Partners, LP (“AIGH LP”). Mr. Hirschman has voting and investment control over the securities indirectly held by AIGH CM, directly held by AIGH LP and directly held by Mr. Hirschman and his family. The address for AIGH CM, AIGH LP and Mr. Hirschman is 6006 Berkeley Avenue, Baltimore, Maryland 21209.
- (9) WVP Emerging Manager Onshore Fund, LLC — AIGH Series holds (i) 100,297 shares of common stock, (ii) pre-funded warrants to purchase up to 611,705 shares of common stock, (iii) warrants to purchase up to 681,777 shares of common stock, (iv) pre-funded warrants issued in the Private Placement to purchase up to 841,604 shares of common stock and (v) common warrants issued in the Private Placement to purchase up to 841,604 shares of common stock. Mr. Orin Hirschman is the managing member of AIGH Capital Management, LLC, a Maryland limited liability company (“AIGH CM”), who is a sub-advisor with respect to securities held by WVP Emerging Manager Onshore Fund, LLC — AIGH Series. Mr. Hirschman has voting and investment control over the securities indirectly held by AIGH CM and directly held by Mr. Hirschman and his family directly. The address for AIGH CM and Mr. Hirschman is 6006 Berkeley Avenue, Baltimore, Maryland 21209.

- (10) Lytton-Kambara Foundation holds (i) 950,016 shares of common stock, 91,646 shares of which are held directly by Laurence Lytton, (ii) pre-funded warrants to purchase up to 1,685,393 shares of common stock, (iii) warrants to purchase up to 2,680,937 shares of common stock, (iv) pre-funded warrants issued in the Private Placement to purchase up to 1,301,115 shares of common stock, and (v) Common Warrants issued in the Private Placement to purchase up to 1,301,115 shares of common stock. Laurence Lytton, the President of the Lytton-Kambara Foundation, has the power to vote and dispose of the securities held by Lytton-Kambara Foundation. The principal place of business of Lytton-Kambara Foundation is 467 Central Park West 17-A, New York, NY 10025.
- (11) 3i, LP holds (i) 198,927 shares of common stock, (ii) pre-funded warrants to purchase up to 600,000 shares of common stock, (iii) warrants to purchase up to 1,660,076 shares of common stock, (iv) Common Warrants issued in the Private Placement to purchase up to 1,239,157 shares of common stock and (v) pre-funded warrants issued in the Private Placement to purchase up to 1,239,157 shares of common stock. 3i Management LLC is the general partner of 3i, LP, and Maier Joshua Tarlow is the manager of 3i Management LLC. As such, Mr. Tarlow exercises sole voting and investment discretion over securities beneficially owned directly or indirectly by 3i, LP and 3i Management LLC. Mr. Tarlow disclaims beneficial ownership of the securities beneficially owned directly by 3i, LP and indirectly by 3i Management LLC. The business address of each of the aforementioned parties is 2 Wooster Street, 2nd Floor, New York, NY 10013. We have been advised that none of Mr. Tarlow, 3i Management LLC, or 3i, LP is a member of the Financial Industry Regulatory Authority, or FINRA, or an independent broker-dealer, or an affiliate or associated person of a FINRA member or independent broker-dealer.
- (12) Lind Global Fund III LP holds (i) 585,376 shares of common stock, (ii) warrants to purchase up to 561,798 shares of common stock, (iii) pre-funded warrants issued in the Private Placement to purchase up to 495,662 shares of common stock and (iv) common warrants issued in the Private Placement to purchase up to 495,662 shares of common stock. Jeff Easton, Managing Member of Lind Global Partners III LLC, GP, has the power to vote and dispose of the securities held by Lind Global Fund III. The principal place of business for Lind Global Fund III LP is 444 Madison Ave., FL. 41, New York, NY 10022.
- (13) The Hewlett Fund LP holds (i) 337,079 shares of common stock, (ii) warrants to purchase up to 337,079 shares of common stock, (iii) pre-funded warrants issued in the Private Placement to purchase up to 495,662 shares of common stock and (iv) common warrants issued in the Private Placement to purchase up to 495,662 shares of common stock. Martin Chopp has the power to vote and dispose of the securities held by the Hewlett Fund LP. The principal place of business for the Hewlett Fund LP is 100 Merrick Road — Suite 400W, Rockville Centre, NY 11570.
- (14) Bennu Pharma Fund, LP holds (i) pre-funded warrants issued in the Private Placement to purchase up to 619,578 shares of common stock and (i) common warrants issued in the Private Placement to purchase up to 619,578 shares of common stock. Bennu Pharma Fund, LP is the registered and beneficial owner of the Registrable Securities. Ori Hershkovitz, as CIO of Bennu Pharma Fund, LP, has voting and investment power over the securities held by Bennu Pharma Fund, LP, and may be deemed to be the beneficial owner of such securities. The principal place of business for Bennu Pharma Fund, LP is 7 Gazit Street, Petah Tika, Israel.
- (15) Richard Peters holds (i) 2,074 shares of common stock, (ii) 9,150 shares of common stock issuable upon exercise of stock options exercisable within 60 days of the date set forth above, (iii) pre-funded warrants issued in the Private Placement to purchase up to 123,915 shares of common stock, and (iv) Common Warrants issued in the Private Placement to purchase up to 123,915 shares of common stock.
- (16) John Hamill holds (i) 30,069 shares of common stock, (ii) 33,704 shares of common stock issuable upon exercise of stock options exercisable within 60 days of the date set forth above, (iii) common warrants to purchase up to 11,710 shares of common stock, (iv) pre-funded warrants issued in the Private Placement to purchase up to 30,978 shares of common stock, and (v) Common Warrants issued in the Private Placement to purchase up to 30,978 shares of common stock.

- (17) Ze'ev Weiss holds (i) 24,368 shares of common stock, (ii) common warrants to purchase 2,740 shares of common stock, (iii) 26,194 shares of common stock issuable upon exercise of stock options exercisable within 60 days of the date set forth above, (iv) pre-funded warrants issued in the Private Placement to purchase up to 30,978 shares of common stock, and (v) Common Warrants issued in the Private Placement to purchase up to 30,978 shares of common stock.

**Relationships with Selling Stockholders**

*Richard Peters* has been a member of our board of directors since June 2020 and currently acts as Chairman.

*John P. Hamill* has served as our Senior Vice President, Chief Financial Officer and Secretary since January 2023.

*Ze'ev Weiss* has served as our Chief Business Advisor since May 2022.

## PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes donees, pledgees, assignees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer (the "Selling Stockholders"), may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. The Selling Stockholders may use any one or more of the following methods when disposing of their securities or interests therein:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- through brokers, dealers or underwriters that may act solely as agents;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- delivery of shares in settlement of short sales;
- in transactions through broker-dealers that agree with the Selling Stockholders to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act of 1933, as amended (the "Securities Act"), if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers, underwriters and other agents may receive commissions or discounts from the Selling Stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121.

The Selling Stockholders may from time to time pledge or grant a security interest in some or all of the shares of common stock owned by them and the pledgee or other secured party, transferee or other successor in interest may sell shares of common stock from time to time under this prospectus, or under a supplement or amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of Selling Stockholders to include the pledgee, secured party, transferee or other successors in interest as Selling Stockholders under this prospectus. The Selling Stockholders also may transfer the shares of common stock in other circumstances in which case the donees, pledgees, assignees, transferees or other successors-in-interest may be the selling beneficial owners for purposes of this prospectus and may sell such shares of common stock from time to time under this prospectus after an amendment or supplement has been filed under Rule 424(b)(3) under, or another applicable provision of, the Securities Act, amending,

if necessary, the list of Selling Stockholders to include the donees, pledgees, assignees, transferees or other successors-in-interest as a Selling Stockholder under this prospectus.

Upon being notified in writing by the Selling Stockholder that any material arrangement has been entered into with a broker-dealer for the sale of shares of common stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act will be filed, disclosing (i) the name of each such Selling Stockholder and of the participating broker-dealer(s), (ii) the number of shares of common stock involved, (iii) the price at which such shares of common stock were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, if applicable, and (vi) other facts material to the transaction.

The Selling Stockholders also may transfer the shares of common stock in other circumstances, in which case the donees, pledgees, assignees, transferees or other successors-in-interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of the securities or interests therein, the Selling Stockholders may enter into hedging transactions after the effective date of the registration statement of which this prospectus is a part with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Stockholders may also sell securities short after the effective date of the registration statement of which this prospectus forms a part and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The Selling Stockholders may also enter into option or other transactions after the effective date of the registration statement of which this prospectus forms a part with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction), including in the short sale transactions.

The Selling Stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each Selling Stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities. Any compensation paid to underwriters, broker-dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers will be provided in the applicable prospectus supplement and shall comply with the rules and requirements of the Financial Industry Regulatory Authority.

We are required to pay certain fees and expenses incurred by us incident to the registration of the securities. We have agreed to indemnify the Selling Stockholders against certain losses, claims, damages and liabilities to which they may become subject, including liabilities under the Securities Act.

We agreed to keep this prospectus effective until the earlier of (i) the date that such securities become eligible for resale without volume or manner-of-sale restrictions and without current public information pursuant to Rule 144 and certain other conditions have been satisfied, or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect.

There can be no assurance that any Selling Stockholder will sell any or all of the shares of common stock registered pursuant to the registration statement of which this prospectus forms a part.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common stock by the Selling Stockholders or any other person. Regulation M may also

restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the shares of common stock. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock.

## DESCRIPTION OF CAPITAL STOCK

*The following description is a general summary of the terms of the shares of common stock or shares of preferred stock that we may issue. The description below and in any prospectus supplement does not include all of the terms of the shares of common stock or shares of preferred stock and should be read together with our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, copies of which have been filed previously with the SEC. For more information on how you can obtain copies of our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, see “Where You Can Find More Information.”*

### **General**

Our charter authorizes us to issue up to 400,000,000 shares of common stock, par value \$0.001 per share, and 40,000,000 shares of preferred stock, par value \$0.001 per share. The following summary sets forth some of the general terms of our common stock. Because this is a summary, it does not contain all of the information that may be important to you. For a more detailed description of our common stock, you should read our amended and restated certificate of incorporation and the amended and restated bylaws, each of which is an exhibit to our Annual Report on Form 10-K to which this summary is also an exhibit, and the applicable provisions of the Delaware General Corporation Law (the “DGCL”).

### **Common stock**

As of March 31, 2026, we had outstanding 11,982,776 shares of common stock.

### ***Voting Rights***

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. An election of directors by our stockholders will be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Other matters shall be decided by the affirmative vote of our stockholders having a majority in voting power of the votes cast by the stockholders present or represented and voting on such matter, except as otherwise disclosed below.

### ***Dividends***

Holders of common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of outstanding preferred stock.

### ***Liquidation***

In the event of our liquidation or dissolution, the holders of common stock are entitled to receive proportionately all assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock. Holders of common stock have no preemptive, subscription, redemption or conversion rights.

### ***Rights and Preferences***

The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

### **Preferred stock**

Our board of directors is authorized to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock. You should refer to the applicable certificate of designation for complete information regarding a series of preferred stock to be issued under this prospectus and the applicable prospectus supplement.

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock. As of March 31, 2026, there were 31,194 shares of Series A Preferred Stock outstanding. We have no present plans to issue any additional shares of preferred stock.

#### **Anti-Takeover effects of Delaware law and our charter and bylaws**

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

#### ***Staggered board; removal of directors***

Our certificate of incorporation and bylaws divides our board of directors into three classes with staggered three-year terms. In addition, a director may only be removed for cause and only by the affirmative vote of the holders of a majority of the votes that all of our stockholders would be entitled to cast in an annual election of directors. Any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, will only be able to be filled by vote of a majority of our directors then in office. The classification of our board of directors and the limitations on the removal of directors and filling of vacancies could make it more difficult for a third party to acquire, or discourage a third party from seeking to acquire, control of our company.

#### ***Stockholder action by written consent; special meetings***

Our certificate of incorporation provides that any action required or permitted to be taken by our stockholders must be effected at a duly called annual or special meeting of such holders and may not be effected by any consent in writing by such holders. Our certificate of incorporation and bylaws also provide that, except as otherwise required by law, special meetings of our stockholders can only be called by our chairman of the board, our Chief Executive Officer or our board of directors.

#### ***Advance notice requirements for stockholder proposals***

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

#### ***Delaware business combination statute***

We are subject to Section 203 of the DGCL. Subject to certain exceptions, Section 203 prevents a publicly held Delaware corporation from engaging in a "business combination" with any "interested stockholder" for three years following the date that the person became an interested stockholder, unless the interested stockholder attained such status with the approval of our board of directors or unless the business combination is approved in a prescribed manner. A "business combination" includes, among other things, a merger or consolidation involving us and the "interested stockholder" and the sale of more than 10% of our assets. In general, an "interested stockholder" is any entity or person beneficially owning 15% or more of our outstanding voting stock and any entity or person affiliated with or controlling or controlled by such entity or person.

***Amendment of certificate of incorporation and bylaws***

DGCL provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or bylaws, unless a corporation's certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Our bylaws may be amended or repealed by a majority vote of our board of directors or by the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in any annual election of directors. In addition, the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in any annual election of directors is required to amend or repeal or to adopt any provisions inconsistent with any of the provisions of our certificate of incorporation described above under "Staggered board; removal of directors" and "Stockholder action by written consent; special meetings."

***Exclusive forum selection***

Our certificate of incorporation provides, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the Court of Chancery of the State of Delaware (or if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware) shall be the sole and exclusive forum for (1) any derivative action or proceeding brought on behalf of our company under Delaware law, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or employees to our company or our stockholders, (3) any action asserting a claim against our company arising pursuant to any provision of the DGCL or our certificate of incorporation or bylaws, (4) any action asserting a claim against our company governed by the internal affairs doctrine or (5) any other action asserting an "internal corporate claim," as defined in Section 115 of the DGCL. These exclusive-forum provisions do not currently apply to claims under the Securities Act of 1933, as amended, or the Exchange Act. Any person or entity purchasing or otherwise acquiring any interest in our securities shall be deemed to have notice of and consented to this provision. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers.

***Listing on The Nasdaq Capital Market***

Our common stock is listed on The Nasdaq Capital Market under the symbol "APRE."

***Authorized but unissued shares***

The authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval, subject to any limitations imposed by the listing requirements of The Nasdaq Capital Market. These additional shares may be used for a variety of corporate finance transactions, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved common stock and preferred stock could make it more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

***Transfer agent and registrar***

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. The transfer agent and registrar's address is 150 Royall St., Canton, MA 02021.

**LEGAL MATTERS**

The validity of the securities being offered hereby will be passed upon for us by DLA Piper LLP (US), Philadelphia, Pennsylvania.

**EXPERTS**

The consolidated balance sheets of Aprea Therapeutics, Inc. and Subsidiaries as of December 31, 2025 and 2024, and the related consolidated statements of operations and comprehensive loss, convertible preferred stock and stockholders' equity, and cash flows for each of the years then ended, have been audited by EisnerAmper LLP, independent registered public accounting firm, as stated in their report, which is incorporated herein by reference, which report includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. Such financial statements have been incorporated herein by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

**WHERE YOU CAN FIND MORE INFORMATION**

We have filed with the SEC a registration statement on Form S-3 under the Securities Act of 1933, as amended (the “Securities Act”), with respect to the securities offered by this prospectus and any applicable prospectus supplement. This prospectus and any applicable prospectus supplement do not contain all of the information set forth in the registration statement and its exhibits and schedules in accordance with SEC rules and regulations. For further information with respect to us and the securities being offered by this prospectus and any applicable prospectus supplement, you should read the registration statement, including its exhibits and schedules. Statements contained in this prospectus and any applicable prospectus supplement, including documents that we have incorporated by reference, as to the contents of any contract or other document referred to are not necessarily complete, and, with respect to any contract or other document filed as an exhibit to the registration statement or any other such document, each such statement is qualified in all respects by reference to the corresponding exhibit. You should review the complete contract or other document to evaluate these statements. You may obtain copies of the registration statement and its exhibits via the SEC’s website at <http://www.sec.gov>.

We file annual, quarterly and current reports, proxy statements and other documents with the SEC under the U.S. Securities Exchange Act of 1934, as amended (the “Exchange Act”). The SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers, including us, that file electronically with the SEC. You may obtain documents that we file with the SEC at <http://www.sec.gov>. We also make these documents available on our website at [www.aprea.com](http://www.aprea.com). Our website and the information contained or accessible through our website is not incorporated by reference in this prospectus or any prospectus supplement, and you should not consider it part of this prospectus or any prospectus supplement.

## INFORMATION INCORPORATED BY REFERENCE

SEC rules permit us to incorporate information by reference in this prospectus and any applicable prospectus supplement. This means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this prospectus and any applicable prospectus supplement, except for information superseded by information contained in this prospectus or any applicable prospectus supplement itself or in any subsequently filed incorporated document. This prospectus and any applicable prospectus supplement incorporate by reference the documents set forth below that we have previously filed with the SEC, other than information in such documents that is deemed to be furnished and not filed. These documents contain important information about us and our business and financial condition.

- [Annual Report on Form 10-K for the year ended December 31, 2025, filed with the SEC on March 16, 2026](#);
- Current Reports on Form 8-K, filed with the SEC on [January 9, 2026](#), [January 23, 2026](#), [January 29, 2026](#), [February 18, 2026](#), [March 16, 2026](#), and [March 30, 2026](#) (in each case, other than the information furnished pursuant to Item 2.02 or Item 7.01); and
- the description of our Common Stock contained in our Registration Statement on [Form 8/A, dated September 30, 2019](#), including any amendments or reports filed for the purpose of updating such description.

All documents that we file (but not those that we furnish) pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act, after the date of the initial registration statement of which this prospectus is a part and prior to the effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus and will automatically update and supersede the information in this prospectus, and any previously filed documents. All documents that we file (but not those that we furnish) pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date of this prospectus and prior to the termination of the offering of any of the securities covered under this prospectus shall be deemed to be incorporated by reference into this prospectus and will automatically update and supersede the information in this prospectus, the applicable prospectus supplement and any previously filed documents.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference in this prospectus or any applicable prospectus supplement shall be deemed to be modified or superseded for purposes of this prospectus and such applicable prospectus supplement to the extent that a statement contained in this prospectus or such applicable prospectus supplement, or in any other subsequently filed document which also is or is deemed to be incorporated by reference in this prospectus and such applicable prospectus supplement, modifies or supersedes such earlier statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus or such applicable prospectus supplement.

You can obtain any of the filings incorporated by reference into this prospectus or any applicable prospectus supplement through us or from the SEC through the SEC's website at <http://www.sec.gov>. Upon request, we will provide, without charge, a copy of any or all of the reports and documents referred to above which have been incorporated by reference into this prospectus or any applicable prospectus supplement. Prospective investors may obtain documents incorporated by reference in this prospectus or any applicable prospectus supplement by requesting them in writing or by telephone from us at our executive offices at:

Aprea Therapeutics, Inc.  
3805 Old Easton Road  
Doylestown, PA 18902  
(215) 948-4119

Our reports and documents incorporated by reference herein may also be found in the "Investor Relations" section of our website at [www.aprea.com](http://www.aprea.com). The content of our website and any information that is linked to or accessible from our website (other than our filings with the SEC that are incorporated by reference, as set forth under "Incorporation of Certain Documents by Reference") is not incorporated by reference into this prospectus or any applicable prospectus supplement and you should not consider it a part of this prospectus, any applicable prospectus supplement, or the registration statement.



**74,349,426 Shares of Common Stock**

**April 29, 2026**

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