As filed with the Securities and Exchange Commission on May 18, 2026

Registration No. 333-

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

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

KIORA PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**98-0443284**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**

169 Saxony Rd., Suite 212
Encinitas, CA 92024
(858) 224-9600
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Brian M. Strem, Ph.D., Chief Executive Officer
Kiora Pharmaceuticals, Inc.
169 Saxony Rd., Suite 212
Encinitas, CA 92024
(Name, address, including zip code, and telephone number, including area code, of agent for service)

With copies to:

Robert A. Petitt, Esq.
Blank Rome LLP
125 High Street
Boston, MA 02110
(617) 415-1200

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

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

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

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

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

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

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

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

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

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

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell the securities until the Registration Statement filed with the Securities and Exchange Commission, of which this prospectus is a part, is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, dated May 18, 2026

PROSPECTUS

KIORA PHARMACEUTICALS, INC.

11,797,088 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) 438,471 shares of our common stock, par value $0.01 per share (the "Common Stock"), initially issued in a private placement on April 6, 2026 (the "Private Placement"), (ii) 1,527,710 shares of Common Stock underlying pre-funded warrants issued in the Private Placement, (iii) 7,864,726 shares of Common Stock underlying Tranche A-1 common stock purchase warrants issued in the Private Placement, and (iv) 1,966,181 shares of Common Stock underlying Tranche A-2 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 "KPRX." On May 14, 2026, the closing price for our Common Stock, as reported on The Nasdaq Capital Market, was $2.58 per share.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" contained in this prospectus beginning on page 7, and under similar headings in the other documents that are incorporated by reference into this prospectus.

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

The date of this Prospectus is , 2026.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission (the "SEC") pursuant to which the selling stockholders named herein may, from time to time, offer and sell or otherwise dispose of the securities covered by this prospectus. You should not assume that the information contained in this prospectus is accurate on any date subsequent to the date set forth on the front cover of this prospectus or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus is delivered or securities are sold or otherwise disposed of on a later date. It is important for you to read and consider all information contained in this prospectus, including the Information Incorporated by Reference herein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you under the captions "Where You Can Find More Information" and "Incorporation of Information by Reference" in this prospectus.

Neither we nor the selling stockholders have authorized any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy any of our securities other than the securities covered hereby, nor does this prospectus constitute an offer to sell or the solicitation of an offer to buy any securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. Persons who come into possession of this prospectus in jurisdictions outside the United States are required to inform themselves about, and to observe, any restrictions as to the offering and the distribution of this prospectus applicable to those jurisdictions.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

We have proprietary rights to trademarks used in this prospectus, including Kiora®. Solely for our convenience, trademarks and trade names referred to in this prospectus may appear without the "®" or "™" symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent possible under applicable law, our rights or the rights to these trademarks and trade names. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other companies. Each trademark, trade name, or service mark of any other company appearing in this prospectus is the property of its respective holder.

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 Kiora Pharmaceuticals, Inc. and its subsidiaries and not to the persons who manage us or sit on our Board of Directors (the "Board").

Overview

We are a clinical-stage pharmaceutical company developing and commercializing therapies for the treatment of retinal diseases. Our pipeline consists of two different small molecules; KIO-301 and KIO-104, both of which defined in greater detail below.

KIO-301 is a potential vision-restoring small molecule that acts as a "molecular photoswitch" specifically created to restore vision in patients with inherited and age-related degenerative retinal diseases. KIO-301's clinical development is initially focused on patients with later stages of vision loss due to retinitis pigmentosa (collectively including all sub-forms, "RP"). KIO-301 (formerly known as B-203) was acquired through the Bayon Therapeutics, Inc. ("Bayon") transaction which closed on October 21, 2021.

On March 17, 2022, we were granted orphan drug designation ("ODD") by the United States Food and Drug Administration ("FDA") for the active pharmaceutical ingredient ("API") in KIO-301. In July 2024, we were granted Orphan Medicinal Product Designation by the European Medicines Agency for KIO-301 for the treatment of non-syndromic, rod-dominant retinal dystrophies, which includes diseases like retinitis pigmentosa, choroideremia, Stargardt disease and others. In September 2024, the European Medicines Agency expanded our Orphan Medicinal Product Designation to also include syndromic, rod-dominant retinal dystrophies.

We completed a Phase 1b clinical trial in September 2023. Data from this trial were presented in November 2023 at the American Academy of Ophthalmology Annual Meeting. The full data package triggered multiple discussions with various potential pharmaceutical partners.

In January 2024, we entered into a strategic development and commercialization agreement ("License Agreement") with Théa Open Innovation ("TOI"), a sister company of the global ophthalmic specialty company Laboratoires Théa. Under the agreement, we granted TOI exclusive worldwide development and commercialization rights, excluding Asia, to KIO-301 for the treatment of degenerative retinal diseases. In exchange, we received an upfront payment of $16 million, with the potential to receive up to $285 million upon achievement of pre-specified clinical development, regulatory and commercial milestones, tiered royalties of up to low 20% on net sales, and reimbursement of all KIO-301 research and development expenses in the territory, moving forward from the date of the execution of the License Agreement.

In October 2024, we, in collaboration with our partner TOI, announced that we received regulatory approval to initiate a Phase 2 clinical trial to investigate KIO-301 for vision restoration in patients with retinitis pigmentosa. The ABACUS-2 trial is expected to be a 36 patient, multi-center, double-masked, randomized, controlled, multiple dose study enrolling patients with ultra-low vision or no light perception regardless of their underlying gene mutation associated with retinitis pigmentosa. Enrollment began the second quarter of 2025 following validation of novel functional vision endpoints. These functional assessments may serve as approvable primary endpoints in subsequent registration studies in the United States, Europe and other major regions.

Based on the results of ABACUS-1, we have the opportunity to expand development of KIO-301 to treat patients with late stages of Choroideremia and Stargardt disease. These diseases have a similar

underlying late-stage pathology as Retinitis Pigmentosa, hence the mechanism of action of KIO-301 could potentially provide a similar benefit to these patients.

In May 2025, we entered into an exclusive option agreement with Senju Pharmaceutical Co., Ltd ("Senju"). Under the agreement, we granted Senju an exclusive option to obtain an exclusive license to the development and commercialization rights of KIO-301 for the treatment of ophthalmic diseases in certain key countries in Asia, including Japan and China. In exchange, we received a nonrefundable payment of $1.25 million. In the future, if the option is exercised and a license agreement is executed, we will be eligible to receive an additional $109.5 million in milestone payments plus tiered, mid double digit royalties on net sales.

KIO-104 is a novel and potent, non-steroidal small-molecule inhibitor of dihydroorotate dehydrogenase (“DHODH”) formulated for intravitreal delivery, and is ideally suited to suppress overactive T-cell activity to treat the underlying inflammation. KIO-104 (formerly known as PP-001) was acquired through the acquisition of Panoptes Pharma GmbH in the December 2020. We are developing KIO-104 for the treatment of retinal inflammatory diseases, including Diabetic Macular Edema (DME) and Posterior Non-Infectious Uveitis. We believe KIO-104 to be best-in-class with picomolar potency and a validated immune modulating mechanism of action designed to overcome the off-target side effects and safety issues associated with commercially available DHODH inhibitors.

Data from a Phase 1b/2a study in patients with Posterior Non-Infectious Uveitis, reported in October 2022, showed that a single injection of KIO-104 decreased intraocular inflammation and improved visual acuity for the duration of the study. Further, KIO-104 reduced macular edema (swelling) which if unchecked, can lead to permanent vision loss. The drug was well tolerated, with no serious side effects on intraocular tissues or other serious adverse events observed. In May 2025, we received approval to start enrolling patients in a Phase 2 trial for KIO-104 in retinal inflammation and began enrollment in the second quarter of 2025.

We have also tested KIO-104 in a preclinical model of Proliferative Vitreoretinopathy (PVR), an orphan disease caused by failed surgical repair of a retinal detachment. This study demonstrated a dose responsive improvement in severity and frequency of scarring, with the high dose group showing no scarring in any animal after a single intravitreal injection of KIO-104. With the existing data package around KIO-104, we believe this program is ready for clinical trials in PVR.

With the current cash and short-term investments on hand, we believe we will have sufficient cash to fund planned operations into late 2028. However, the acceleration or reduction of cash outflows by management can significantly impact the timing needed for raising additional capital to complete development of our products. We will need additional financing to support our continuing operations. We will seek to fund our operations through public or private equity, debt financings, license and development agreements, or other sources, which may include collaborations with third parties. Adequate additional financing may not be available to us on acceptable terms, or at all. Our failure to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategy. We will need to generate significant revenue to achieve profitability, and we may never do so.

Throughout our history, we have not generated significant revenue. We have never been profitable and from inception through December 31, 2025, our losses from operations have aggregated $154.2 million. Our net income (loss) was a net loss of $(10.8) million and net income of $3.6 million for the years ended December 31, 2025 and 2024, respectively. We expect to incur significant expenses and increasing operating losses for the foreseeable future as we continue the development and clinical trials of and seek regulatory approval for our product candidates. If we obtain regulatory approval for our product candidates, we expect to incur significant expenses in order to create an infrastructure to support their commercialization including sales, marketing, and distribution functions.

Recent Developments

Private Placement

On April 3, 2026, we entered into a securities purchase agreement with certain institutional investors, pursuant to which we issued and sold to the investors (i) 438,471 shares of Common Stock, (ii) pre-funded Common Stock purchase warrants to purchase an aggregate of up to 1,527,710 shares of Common Stock at an exercise price of $0.0001 per share, (iii) Tranche A-1 Common Stock purchase warrants to purchase up to 7,864,726 shares of Common Stock at an exercise price of $1.94 per share, and (iv) Tranche A-2 Common Stock purchase warrants to purchase up to 1,966,181 shares of Common Stock at an exercise price of $1.94 per share. The combined purchase price for each share of Common Stock, together with the accompanying portion of a Tranche A-1 warrant and Tranche A-2 warrant, was $2.5430 and the combined purchase price for each pre-funded warrant, together with the accompanying portion of a Tranche A-1 warrant and Tranche A-2 warrant, was $2.5429, which price represents the “Minimum Price” in accordance with Nasdaq Listing Rule 5635(d), for aggregate gross proceeds at closing of approximately $5.0 million and potential future warrant exercise gross proceeds of approximately $19.0 million. The closing of the Private placement occurred on April 6, 2026.

The Tranche A-1 Warrants became exercisable immediately and will terminate upon the earlier of (i) the nine month anniversary of issuance and (ii) 30 days after we announce the consummation of a transaction that results in a material expansion of the potential commercial opportunity of our therapeutic assets. The Tranche A-2 Warrants became exercisable upon issuance and will terminate upon the earlier of (i) the four year anniversary of issuance and (ii) 30 days after we provide notice of the completion of enrollment in a Phase 3 clinical trial for any Company asset. To the extent that the exercise of a Tranche A-1 Warrant or Tranche A-2 Warrant would result in the holder beneficially owning greater than 4.99% (or, at the election of the holder, greater than 9.99%) of our outstanding common stock immediately following such exercise, the holder will instead receive pre-funded warrants in substantially the same form as the Pre-Funded Warrants issued at closing.

The Pre-Funded Warrants became exercisable form 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.

As a condition to closing for the Private Placement, we entered into a Registration Rights Agreement (the “Registration Rights Agreement”) with the Purchasers, pursuant to which we agreed to file a registration statement registering the resale of the Private Placement Shares and the shares of Common Stock issuable upon exercise of the Tranche A-1 Warrants, the Tranche A-2 Warrants and the Pre-Funded Warrants within 45 days following the date of the Securities Purchase Agreement. If a resale registration statement covering the shares of Common Stock underlying the Tranche A-1 Warrants and the Tranche A-2 Warrants is not effective and available at the time of exercise, the Tranche A-1 Warrants and the Tranche A-2 Warrants may be exercised by means of a “cashless” exercise formula. The Pre-Funded Warrants may be exercised by means of a “cashless” exercise formula at any time while outstanding. The warrants do not contain any Black Scholes cash payment obligations, any “price protection” anti-dilution protection or any “price reset” provisions pursuant to which the exercise price of the warrants is subject to adjustment or reset at a future date or upon the occurrence of specified or contingent events directly or indirectly related to our business or the market prices for the Common Stock, or upon any future issuance or sale by us of shares of our capital stock or securities exercisable or exchangeable for or convertible into shares of our capital stock at exercise or conversion prices below the exercise price of the warrants, other than standard pro rata adjustments for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction that would impact our Common Stock generally.
The Securities Purchase Agreement requires 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 within 45 days following the date of the Securities Purchase Agreement. If a resale registration statement covering those securities is not effective and available at the time of exercise, the Tranche A-1 warrants and the Tranche A-2 warrants may be exercised by means of a "cashless" exercise formula. The pre-funded warrants may be exercised by means of a "cashless" exercise formula at any time while outstanding. The warrants do not contain any Black Scholes cash payment obligations, any "price protection" anti-dilution protection or any "price reset" provisions pursuant to which the exercise price of the warrants is subject to adjustment or reset at a future date or upon the occurrence of specified or contingent events directly or indirectly related to our business or the market prices for the Common Stock, or upon any future issuance or sale by us of shares of capital stock or securities exercisable or exchangeable for or convertible into shares of our capital stock at exercise or conversion prices below the exercise price of the warrants, other than standard pro rata adjustments for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction that would impact our Common Stock generally.

This prospectus relates to the resale of up to (i) 438,471 shares of Common Stock, (ii) 1,527,710 shares of Common Stock underlying pre-funded warrants, (iii) 7,864,726 shares of Common Stock underlying Tranche A-1 warrants, and (iv) 1,966,181 shares of Common Stock underlying Tranche A-2 warrants, in each case issued in the Private Placement.

Our Corporate Information

Kiora Pharmaceuticals, Inc. was formed in Delaware on December 26, 2004 under the name EyeGate Pharmaceuticals, Inc. On November 8, 2021, we completed a merger of our wholly owned Delaware subsidiary, Kiora Pharmaceuticals, Inc. (incorporated in October 2021) into EyeGate Pharmaceuticals, Inc., which merger resulted in the amendment of our restated certificate of incorporation to change our name to "Kiora Pharmaceuticals, Inc." effective November 8, 2021. In connection with the name change, we changed our symbol on the Nasdaq Capital Market to "KPRX" on November 8, 2021. We were originally incorporated in 1998 under the name of Optis France S.A. in Paris, France. We have four wholly owned subsidiaries: Jade Therapeutics, Inc., Kiora Pharmaceuticals, GmbH (formerly known as Panoptes Pharma Ges.m.b.H), Bayon Therapeutics, Inc., and Kiora Pharmaceuticals Pty Ltd (formerly known as Bayon Therapeutics Pty Ltd). Our former subsidiary, EyeGate Pharma S.A.S. was dissolved effective December 31, 2020. Our principal executive offices are located at 169 Saxony Rd., Suite 212, Encinitas, California 92024, and our telephone number is (858) 224-9600. Our website address is *www.kiorapharma.com*. Our website and the information contained in, or accessible through, our website will not be deemed to be incorporated by reference into this prospectus and does not constitute part of this prospectus. You should not rely on any such information in making your decision whether to purchase our securities.

THE OFFERING

We are registering for resale by the selling stockholders named herein an aggregate of 11,797,091 shares of our Common Stock as described below.

Securities being offered:	11,797,088 shares of our Common Stock, including (i) 438,471 shares of Common Stock issued to the selling stockholders in the Private Placement, (ii) 1,527,710 shares of Common Stock underlying pre-funded warrants issued in the Private Placement, (iii) 7,864,726 shares of Common Stock underlying Tranche A-1 common stock purchase warrants issued to the selling stockholders in the Private Placement, and (iv) 1,966,181 shares of Common Stock underlying Tranche A-2 common stock purchase warrants issued to the selling stockholders 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 10.
Market for common stock:	Our Common Stock is listed on The Nasdaq Capital Market under the symbol “KPRX.” On May 14, 2026, the last reported sale price of our Common Stock on The Nasdaq Capital Market was $2.58. 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 a high degree of risk. You should carefully consider the risks described herein and in the documents incorporated by reference in this prospectus and any prospectus supplement, as well as other information we include or incorporate by reference into this prospectus and any applicable prospectus supplement, before making an investment decision. Our business, financial condition or results of operations could be materially adversely affected by the materialization of any of these risks. The trading price of our securities could decline due to the materialization of any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described herein and in the documents incorporated herein by reference, including (i) our most recent annual report on Form 10-K which is on file with the SEC and is incorporated herein by reference and (ii) other documents we file with the SEC that are deemed incorporated by reference into this prospectus.

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.

The securities that may be resold by the selling stockholders pursuant to this prospectus represent approximately 72.7% of the total outstanding shares of our common stock as of May 14, 2026, after giving effect to the issuance of all shares of common stock underlying the pre-funded warrants and common warrants registered hereunder but without giving effect to the beneficial ownership limitations contained in such warrants, and, following the effectiveness of the registration statement of which this prospectus forms a part, such securities 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.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains, and the documents incorporated herein by reference contain, forward-looking statements that involve risks and uncertainties. The forward-looking statements are contained principally in the sections of this prospectus and the documents incorporated herein by reference under the captions "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business." In some cases, you can identify forward-looking statements by terms such as "may," "might," "will," "objective," "intend," "should," "seek," "aim," "think," "optimistic," "strategy," "goals," "sees," "new," "guidance," "future," "continue," "drive," "growth," "long-term," "develop," "possible," "emerging," "opportunity," "pursue," "could," "can," "would," "expect," "believe," "anticipate," "project," "target," "design," "estimate," "predict," "potential," "plan" or the negative of these terms, and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- the timing and success of preclinical studies and clinical trials conducted by us and our development partners;
- the ability to obtain and maintain regulatory approval of our product candidates, and the labeling for any approved products;
- the scope, progress, expansion, and costs of developing and commercializing our product candidates;
- the size and growth of the potential markets for our product candidates and the ability to serve those markets;
- our expectations regarding our expenses and revenue, the sufficiency of our cash resources and needs for additional financing;
- the rate and degree of market acceptance of any of our product candidates;
- our expectations regarding competition;
- our anticipated growth strategies;
- our ability to attract or retain key personnel;
- our ability to establish and maintain development partnerships;
- our expectations regarding federal, state and foreign regulatory requirements;
- regulatory developments in the U.S. and foreign countries;
- our ability to obtain and maintain intellectual property protection for our product candidates;
- the anticipated trends and challenges in our business and the market in which we operate; and
- the potential for the cash exercise of warrants and our use of proceeds from any such cash exercise.

Any forward-looking statement made by us in this prospectus speaks only as of the date on which it is made. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. Except as required by applicable law, we do not plan to

publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

USE OF PROCEEDS

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

A portion of 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 $1.94 per share with respect to the Tranche A-1 and Tranche A-2 common stock purchase warrants and $0.0001 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 to support our operations, including for clinical trials, for working capital and for other general corporate purposes. 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

The Common Stock being offered by the selling stockholders are those previously issued to the selling stockholders, and those issuable to the selling stockholders, upon exercise of the warrants. For additional information regarding the issuances of those shares of Common Stock and warrants, see "Prospectus Summary—Recent Developments—Private Placement" above. 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. Except for the ownership of the shares of Common Stock and the warrants and except as disclosed herein, the selling stockholders have not had any material relationship with us within the past three years.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of Common Stock by each of the selling stockholders. The second column lists the number of shares of Common Stock beneficially owned by each selling stockholder, based on its ownership of the shares of Common Stock and warrants, as of May 14, 2026, assuming exercise of the warrants held by the selling stockholders on that date, without regard to any limitations on exercises. The third column lists the shares of Common Stock being offered by this prospectus by the selling stockholders.

In accordance with the terms of a securities purchase agreement with the selling stockholders, this prospectus generally covers the resale of the sum of (i) the number of shares of Common Stock issued to the selling stockholders in the "Prospectus Summary—Recent Developments—Private Placement" described above and (ii) the maximum number of shares of Common Stock issuable upon exercise of the related warrants, 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. The fourth column assumes the sale of all of the shares offered by the selling shareholders pursuant to this prospectus.

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 9.99%, as applicable, 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 in the second and fourth columns do not reflect these limitations. The selling stockholders may sell all, some or none of their shares in this offering. See "Plan of Distribution."

Name of Selling Stockholder	Number of shares of Common Stock Owned Prior to Offering	Maximum Number of shares of Common Stock to be Sold Pursuant to this Prospectus[1]	Number of shares of Common Stock Owned After Offering
ADAR1 Partners, LP[2]	3,577,562	2,052,692	1,524,870
Spearhead Insurance Solutions IDF, LLC – Series ADAR1[3]	330,667	306,725	23,942
Perceptive Life Sciences Master Fund, Ltd.[4]	9,437,671	9,437,671	0

[1] 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 and assuming that the Stockholder Approval has been obtained.

[2] ADAR1 Partners, LP holds (i) 143,999 shares of Common Stock, (ii) pre-funded warrants to purchase 753,226 shares of common stock, (iii) Tranche A common stock purchase warrants to purchase up to 484,880 shares of common stock, (iv) Tranche B common stock purchase warrants to purchase up to 484,880 shares of common stock, (v) Tranche A-1 common stock purchase warrants to purchase up to 1,368,462 shares of common stock, and (vi) Tranche A-2 common stock purchase warrants to purchase up to 342,115 shares of common stock. ADAR1 Capital Management, LLC ("ADAR1 LLC"), the investment advisor of ADAR1 Partners, LP, has voting and investment control of the securities held by ADAR1 Partners, LP. ADAR1 Capital Management GP, LLC ("ADAR1 GP") is the general partner of ADAR1 Partners, LP. Daniel Schneeberger is the Manager of ADAR1 LLC and ADAR1 GP. The principal business address of ADAR1 Partners, LP is 3503 Wild Cherry Drive, Building 9, Austin, TX 78738.

[3] Spearhead Insurance Solutions IDF - Series ADAR1 ("Spearhead") holds (i) 23,942 shares of common stock, (ii) pre-funded warrants to purchase 51,121 shares of common stock, (iii) Tranche A-1 common stock purchase warrants to purchase up to 204,483 shares of common stock, and (iv) Tranche A-2 common stock purchase warrants to purchase up to 51,121 shares of common stock. ADAR1 LLC, the sub-advisor of Spearhead, has voting and investment control of the securities held by Spearhead. Daniel Schneeberger is the Manager of ADAR1 LLC. The principal business address of Spearhead Insurance Solutions IDF, LLC - Series ADAR1 is 3828 Kennet Pike, Suite 202, Greenville, DE 19807.

[4] Perceptive Advisors, LLC ("Perceptive Advisors") is the investment advisor of the Perceptive Life Sciences Master Fund, Ltd. (the "Perceptive Master Fund") which holds (i) 438,471 shares of Common Stock, (ii) pre-funded warrants to purchase 1,134,474 shares of common stock, (iii) Tranche A-1 common stock purchase warrants to purchase up to 6,291,781 shares of common stock, and (iv) Tranche A-2 common stock purchase warrants to purchase up to 1,572,945 shares of common stock. Perceptive Advisors may be deemed to have beneficial ownership of the shares beneficially owned by the Perceptive Master Fund. Joseph Edelman is the controlling person of Perceptive Advisors and accordingly, may be deemed to have beneficial ownership of the shares beneficially owned by the Perceptive Master Fund and Perceptive Advisors. Perceptive Advisors, the Perceptive Master Fund and Mr. Edelman disclaim beneficial ownership of all such securities except to the extent of its or his pecuniary interest therein. The business address for each of Perceptive Advisors, the Perceptive Master Fund and Mr. Edelman is 51 Astor Place, 10th Floor, New York, NY 10003.

PLAN OF DISTRIBUTION

Each selling stockholder (collectively, the "Selling Stockholders") of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the Nasdaq Capital Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. A Selling Stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- 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 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.

In connection with the sale of the securities or interests therein, the Selling Stockholders may enter into hedging transactions 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 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 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).

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.

We agreed to keep this prospectus effective until 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. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

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. We will make copies of this prospectus available to the Selling Stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

DETERMINATION OF OFFERING PRICE

The prices at which the shares of Common Stock covered by this prospectus may actually be sold will be determined by the prevailing public market price for shares of Common Stock, by negotiations between the Selling Stockholders and buyers of our Common Stock in private transactions or as otherwise described in “Plan of Distribution.”

LEGAL MATTERS

Certain legal matters in connection with this offering will be passed upon for us by Blank Rome, LLP, Boston, MA.

EXPERTS

The consolidated balance sheets of Kiora Pharmaceuticals, Inc. as of December 31, 2025 and 2024, and the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for each of the years then ended, have been audited by Haskell & White LLP, independent registered public accounting firm, as stated in their report dated March 25, 2026, which is incorporated herein by reference. 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 which this prospectus forms a part. The rules and regulations of the SEC allow us to omit from this prospectus certain information included in the registration statement. For further information about us and our securities, you should refer to the registration statement and the exhibits and schedules filed with the registration statement. With respect to the statements contained in this prospectus regarding the contents of any agreement or any other document, in each instance, the statement is qualified in all respects by the complete text of the agreement or document, a copy of which has been filed as an exhibit to the registration statement.

We are subject to the information requirements of the Exchange Act and, in accordance therewith, file annual, quarterly and special reports, proxy statements and other information with the SEC. These documents may be accessed through the SEC's electronic data gathering, analysis and retrieval system, or EDGAR, via electronic means, including the SEC's home page on the Internet (*www.sec.gov*).

We post on our public website (*www.kiorapharma.com*) our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Our website and the information contained on that site, or connected to that site, are not incorporated into and are not a part of this prospectus.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference the information and reports we file with it under File No. 001-36672, which means that we can disclose important information to you by referring you to those publicly available documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede the information already incorporated by reference. We are incorporating by reference the documents listed below:

- Our Annual Report on Form 10-K for the year ended December 31, 2025 filed with the SEC on March 25, 2026 and the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2025 from our Definitive Proxy Statement on Schedule 14A filed with the SEC on April 30, 2026;

- Our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2026 filed with the SEC on May 8, 2026;

- Our Current Reports on Form 8-K filed with the SEC on April 2, 2026, and April 7, 2026 (in each case, except for information contained therein which is furnished rather than filed);

- The description of our common stock contained (a) in our registration statement on Form 8-A12B filed with the SEC on July 28, 2015 and amended on July 30, 2015, including any amendments or reports filed for the purposes of updating this description, and (b) Exhibit 4.1 to our annual report on Form 10-K filed with the SEC on March 24, 2020.

We also incorporate by reference any future filings (other than any filings or portions of such reports that are not deemed “filed” under the Exchange Act in accordance with the Exchange Act and applicable SEC rules, including Current Reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to the effectiveness of the registration statement, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus, and such documents will become a part of this prospectus from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will furnish to anyone to whom a prospectus is delivered, including any beneficial owner, without charge, on written or oral request, a copy of any or all of the documents incorporated by reference in this prospectus, including exhibits to these documents. You should direct any requests for documents to Kiora Pharmaceuticals, Inc., 169 Saxony Rd., Suite 212, Encinitas, CA 92024 or our telephone number at (858) 224-9600.

You also may access these filings on our website at *www.kiorapharma.com*. We do not incorporate the information on our website into this prospectus or any supplement to this prospectus and you should not consider any information on, or that can be accessed through, our website as part of this prospectus or any supplement to this prospectus (other than those filings with the SEC that we specifically incorporate by reference into this prospectus or any supplement to this prospectus). You may also access these filings at the SEC’s website at www.sec.gov.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus modifies, supersedes or replaces such statement.

KIORA PHARMACEUTICALS, INC.

11,797,088 Shares of Common Stock

PROSPECTUS

, 2026

Part II—INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The Company is paying all expenses of the offering. No portion of these expenses will be borne by the selling stockholder. The selling stockholder, however, will pay any other expenses incurred in selling its Common Stock, including any brokerage commissions or costs of sale. Following is an itemized statement of all expenses in connection with the issuance and distribution of the securities to be registered. All of the amounts shown are estimates, except for the SEC Registration Fees.

Securities and Exchange Commission registration fee	$	3,324
Legal fees and expenses		51,129
Accounting fees and expenses		8,000
Total	$	62,453

Item 15. Indemnification of Directors and Officers

Our amended and restated certificate of incorporation contains provisions that eliminate, to the maximum extent permitted by the General Corporation Law of the State of Delaware, the personal liability of our directors for monetary damages for breach of their fiduciary duties as directors. Our amended and restated bylaws provide that we must indemnify our directors and officers and may indemnify our employees and other agents to the fullest extent permitted by the General Corporation Law of the State of Delaware.

Sections 145 and 102(b)(7) of the General Corporation Law of the State of Delaware provide that a corporation may indemnify any person made a party to an action by reason of the fact that he or she was a director, officer, employee or agent of the corporation or is or was serving at the request of a corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of an action by or in right of the corporation, no indemnification may generally be made in respect of any claim as to which such person is adjudged to be liable to the corporation.

We have entered into indemnification agreements with our directors and executive officers, in addition to the indemnification provided for in our amended and restated bylaws, and intend to enter into indemnification agreements with any new directors and executive officers in the future. We have purchased and intend to maintain insurance on behalf of any person who is or was a director or officer of us against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions. See also "Undertakings" set out in response to Item 17 herein.

Item 16. Exhibits

A list of exhibits filed with this registration statement on Form S-3 is set forth on the Exhibit Index and is incorporated herein by reference.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(a) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933,

(b) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement,

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

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

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(a) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(b) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date

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

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

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Encinitas, State of California, on May 18, 2026.

KIORA PHARMACEUTICALS, INC.

By: /s/ Brian M. Strem, Ph.D.
Name: Brian M. Strem, Ph.D.
Title: President and Chief Executive Officer

KNOW ALL BE THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints each of Brian M. Strem, Ph.D. and Melissa Tosca as such person's true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in such person's name, place and stead, in any and all capacities, to sign any or all amendments (including, without limitation, post-effective amendments) to this registration statement (or any registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or any substitute or substitutes of them, may lawfully do or cause to be done by virtue hereof.

Signature	Title	Date
/s/ Brian M. Strem, Ph.D. Brian M. Strem, Ph.D.	President, Chief Executive Officer and Director *(principal executive officer)*	May 18, 2026
/s/ Melissa Tosca Melissa Tosca	Chief Financial Officer *(principal financial and accounting officer)*	May 18, 2026
/s/ Praveen Tyle, Ph.D. Praveen Tyle, Ph.D.	Chairman	May 18, 2026
/s/ Lisa Walters-Hoffert Lisa Walters-Hoffert	Director	May 18, 2026
/s/ David Hollander, MD, MBA David Hollander, MD, MBA	Director	May 18, 2026
/s/ Erin Parsons Erin Parsons	Director	May 18, 2026
/s/ Aron Shapiro Aron Shapiro	Director	May 18, 2026
/s/ Carmine Stengone Carmine Stengone	Director	May 18, 2026

EXHIBIT INDEX

Exhibit Number	Description of Exhibit
3.1	Restated Certificate of Incorporation of the Registrant (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on February 20, 2015 and incorporated by reference thereto).
3.2	Certificate of Amendment to the Restated Certificate of Incorporation of the Registrant, filed July 10, 2018 (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on July 11, 2018 and incorporated by reference thereto).
3.3	Certificate of Amendment to the Restated Certificate of Incorporation of the Registrant, filed August 28, 2019 (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on August 29, 2019 and incorporated by reference thereto).
3.4	Certificate of Amendment to the Restated Certificate of Incorporation of the Registrant, filed June 25, 2020 (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on November 8, 2021 and incorporated by reference thereto).
3.5	Certificate of Ownership and Merger of the Registrant, filed November 5, 2021 (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on June 26, 2020 and incorporated by reference thereto).
3.6	Certificate of Amendment to the Restated Certificate of Incorporation of the Registrant, filed September 26, 2022 (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on September 26, 2022 and incorporated by reference thereto).
3.7	Certificate of Amendment to the Restated Certificate of Incorporation of the Registrant, filed May 1, 2024 (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on May 1, 2024 and incorporated by reference thereto).
3.8	Certificate of Amendment to the Restated Certificate of Incorporation of the Registrant, filed June 6, 2024 (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on June 7, 2024 and incorporated by reference thereto).
3.9	Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on June 27, 2016 and incorporated by reference thereto).
3.10	Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on June 14, 2017 and incorporated by reference thereto).
3.11	Certificate of Designation of Preferences, Rights and Limitations of Series C Convertible Preferred Stock (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on April 17, 2018 and incorporated by reference thereto).
3.12	Certificate of Designation of Preferences, Rights and Limitations of Series D Convertible Preferred Stock (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on December 21, 2020 and incorporated by reference thereto).
3.13	Certificate of Designation of Preferences, Rights and Limitations of Series E Convertible Preferred Stock (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on July 26, 2022 and incorporated by reference thereto).
3.14	Certificate of Designation of Preferences, Rights and Limitations of Series F Convertible Preferred Stock (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on June 6, 2023 and incorporated by reference thereto).
3.15	Third Amended and Restated By-laws of the Registrant (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on August 4, 2022 and incorporated by reference thereto).
4.1	Form of Pre-Funded Warrant, dated April 6, 2026 (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on April 7, 2026 and incorporated by reference thereto).

4.2	Form of Tranche A-1 Warrant, dated April 6, 2026 (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on April 7, 2026 and incorporated by reference thereto).
4.3	Form of Tranche A-2 Warrant, dated April 6, 2026 (previously filed as an exhibit to the Registrant's Current Report on Form 8-K filed on April 7, 2026 and incorporated by reference thereto).
5.1*	Opinion of Blank Rome LLP.
23.1*	Consent of Haskell & White LLP.
23.2*	Consent of Blank Rome LLP (included in Exhibit 5.1).
24.1*	Power of Attorney (contained on signature page hereto).
Filing Fees*	Calculation of Registration Fee.

Filed herewith.

Exhibit FILING FEES

Calculation of Filing Fee Tables

FORM S-3

……..
(Form Type)

KIORA PHARMACEUTICALS, INC.

……
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price [1]	Fee Rate	Amount of Registration Fee
Newly Registered Securities								
Fees to Be Paid	Equity	Common Stock, par value $0.01 per share [2]	Rule 457(o)			$ 1,115,032	$138.10 per $1,000,000	$ 153.99
Fees to Be Paid	Equity	Pre-funded Warrants to purchase Common Stock [2]	Rule 457(o)			$ 3,884,968	$138.10 per $1,000,000	$ 536.51
Fees to Be Paid	Equity	Warrants to purchase Common Stock [2]	Rule 457(g)			$ —	[3]	$ —
Fees to Be Paid	Equity	Common Stock issuable upon exercise of Warrants [2]	Rule 457(o)			$ 19,071,962	$138.10 per $1,000,000	$ 2,633.84
	Total Offering Amounts					$ 24,071,962		$ 3,324.34
	Total Fee Offsets							$ —
	Net Fee Due							$ 3,324.34

(1) Estimated solely for the purpose of calculating the amount of the registration fee in accordance with Rule 457(i) and Rule 457(o) under the Securities Act of 1933 (the "Securities Act").

(2) Pursuant to Rule 416 under the Securities Act, there are also being registered such indeterminate number of additional securities as may be issued to prevent dilution resulting from share splits, share dividends or similar transactions.

(3) No registration fee required pursuant to Rule 457(g).

BLANKROME
125 High Street | Boston, MA 02110
blankrome.com

May 18, 2026

Kiora Pharmaceuticals, Inc.
169 Saxony Road, Suite 212
Encinitas, California 92024

Re: Kiora Pharmaceuticals, Inc.
Registration Statement on Form S-3

Ladies and Gentlemen:

This opinion is furnished to you in connection with a Registration Statement on Form S-3 (the "Registration Statement") filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), for the registration of the resale of an aggregate of 11,797,088 shares (the "Shares") of common stock, par value $0.01 per share (the "Common Stock"), of Kiora Pharmaceuticals, Inc., a Delaware corporation (the "Company"). All of the Shares are being registered on behalf of certain stockholders of the Company (the "Selling Stockholders"). The Shares consist of (i) 438,471 outstanding shares of Common Stock (the "Private Placement Shares") that were sold to the Selling Stockholders pursuant to that certain Securities Purchase Agreement dated as of April 3, 2026 (the "Securities Purchase Agreement"); (ii) 1,527,710 shares of Common Stock (the "Pre-Funded Warrant Shares") issuable upon the exercise of outstanding pre-funded warrants (the "Pre-Funded Warrants") that are were sold to the Selling Stockholders pursuant to the Securities Purchase Agreement; (iii) 7,864,726 shares of Common Stock (the "Tranche A-1 Warrant Shares") issuable upon the exercise of outstanding Tranche A-1 common stock purchase warrants (the "Tranche A-1 Common Warrants") that were sold to the Selling Stockholders pursuant to the Securities Purchase Agreement; and (iv) 1,966,181 shares of Common Stock (the "Tranche A-2 Warrant Shares" and, collectively with the Tranche A-1 Warrant Shares, the "Common Warrant Shares") issuable upon the exercise of outstanding Tranche A-2 common stock purchase warrants (the "Tranche A-2 Common Warrants" and, collectively with the Tranche A-1 Common Warrants, the "Common Warrants") that were sold to the Selling Stockholders pursuant to the Securities Purchase Agreement. This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act.

In rendering the opinion set forth herein, we have examined originals or copies, certified or otherwise identified to our satisfaction, of (i) the Registration Statement and all exhibits thereto; (ii) the Securities Purchase Agreement; (iii) the form of Pre-Funded Warrant; (iv) the form of Tranche A-1 Warrant; (v) the form of Tranche A-2 Warrant; (vi) resolutions adopted by the Board of Directors of the Company (the "Board"); (vii) the restated certificate of incorporation of the Company, as amended (the "Certificate of Incorporation"); (viii) the third amended and restated bylaws of the Company (the "Bylaws"); and (ix) such other corporate records,

agreements, certificates, including, but not limited to, certificates or comparable documents of public officials and of officers and representatives of the Company, statutes and other instruments and documents as we considered relevant and necessary as a basis for the opinions hereinafter expressed.

In rendering this opinion, we have assumed, without inquiry, (i) the authenticity of all documents submitted to us as originals; (ii) the conformity to the original documents of all documents submitted to us as facsimile, electronic, certified or photostatic copies, and the authenticity of the originals of such copies; (iii) the legal capacity of all natural persons and the genuineness of all signatures on the Registration Statement and all documents submitted to us; and (iv) that the books and records of the Company are maintained in accordance with proper corporate procedures. With respect to the Shares, we express no opinion to the extent that future issuances of securities of the Company, adjustments to outstanding securities of the Company or other matters cause the Pre-Funded Warrants or the Common Warrants to be exercisable for more shares of Common Stock than the number available for issuance by the Company, or that the consideration paid upon exercise of the Pre-Funded Warrants or the Common Warrants is below the par value per share of the Common Stock.

Based upon and subject to the foregoing, we are of the opinion that (i) the Private Placement Shares are validly issued, fully paid and nonassessable, (ii) the Pre-Funded Warrant Shares have been duly authorized for issuance and, when issued, delivered and paid for in accordance with the terms of the Pre-Funded Warrants, including the payment of the exercise price therefor, will be validly issued, fully paid and nonassessable, and (iii) the Common Warrant Shares have been duly authorized for issuance and, when issued, delivered and paid for in accordance with the terms of the Common Warrants, including the payment of the exercise price therefor, will be validly issued, fully paid and nonassessable.

We are opining solely on all applicable statutory provisions of Delaware corporate law, including the rules and regulations underlying those provisions, all applicable provisions of the Delaware Constitution and all applicable judicial and regulatory determinations. This opinion is limited to the laws of the State of Delaware as in effect on the date hereof and we express no opinion with respect to the laws of any other jurisdiction.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and to the reference to our firm under the caption “Legal Matters” in the Registration Statement. In giving our consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Blank Rome LLP

Blank Rome LLP

Exhibit 23.1

HASKELLWHITE
CERTIFIED PUBLIC ACCOUNTANTS | BUSINESS ADVISORS
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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the prospectus that constitutes a part of the Registration Statement on Form S-3 of Kiora Pharmaceuticals, Inc. (the "Company") of our report dated March 25, 2026, relating to our audit of the Company's consolidated financial statements as of December 31, 2025 and 2024, and for each of the years then ended, included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2025 filed with the U.S. Securities and Exchange Commission.

We also consent to the reference to us under the heading "Experts" in the prospectus.

/s/ Haskell & White LLP

HASKELL & WHITE LLP

Irvine, California

May 18, 2026