

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

---

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

**Jasper Therapeutics, Inc.**  
(Exact name of registrant as specified in its charter)

---

**Delaware**

(State or other jurisdiction of  
incorporation or organization)

---

**84-2984849**

(I.R.S. Employer  
Identification Number)

**2200 Bridge Pkwy Suite #102  
Redwood City, CA 94065  
(650) 549-1400**

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

---

**Jeet Mahal**  
**President, Chief Executive Officer and Interim Chief Financial Officer**  
**Jasper Therapeutics, Inc.**  
**2200 Bridge Pkwy Suite #102**  
**Redwood City, CA 94065**  
**(650) 549-1400**

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

---

*With copies to:*  
**Fahd M.T. Riaz, Esq.**  
**DLA Piper LLP (US)**  
**1650 Market Street, Suite 5000**  
**Philadelphia, PA 19103-7300**  
**(215) 656-3316**

---

**Approximate date of commencement of proposed sale to the public:**

From time to time after the effective date of this Registration Statement.

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

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

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

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

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

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

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

Large accelerated filer ☐

Non-accelerated filer ☒

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 the 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, as amended, or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.**

---

---

---

**The information in this preliminary prospectus is not complete and may be changed. The selling stockholders named in this preliminary prospectus may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.**

**PRELIMINARY PROSPECTUS**

**SUBJECT TO COMPLETION, DATED OCTOBER 14, 2026**



**Jasper Therapeutics, Inc.**

**Up to 284,013,011 Shares of Common Stock**

This prospectus relates to the possible resale, from time to time by the selling stockholders named in this prospectus, of up to an aggregate of 284,013,011 shares (the "Resale Shares") of our voting common stock, par value \$0.0001 per share ("Common Stock"), issuable upon conversion of the 4,655,951 shares of our non-voting convertible preferred stock, par value \$0.0001 per share (the "Preferred Stock"), issued to certain investors in a private placement transaction pursuant to that certain securities purchase agreement, dated July 16, 2026 (such shares of Preferred Stock, the "PIPE Preferred Stock"). Each share of PIPE Preferred Stock will automatically convert into 61 shares of Common Stock, subject to beneficial ownership limitations, on the third business day following the receipt of stockholder approval of, among other things, the issuance of shares of Common Stock upon conversion of the Preferred Stock.

Our registration of the Resale Shares covered by this prospectus does not mean that the selling stockholders will sell any of the Resale Shares. We are not offering any shares of our Common Stock for sale pursuant to this prospectus. We will not receive any proceeds from the sale of the Resale Shares by the selling stockholders. The selling stockholders will receive all of the proceeds from any such sales. For more information about the selling stockholders, please see the section entitled "Selling Stockholders."

The selling stockholders may sell or otherwise dispose of the Resale Shares publicly or through private transactions at prevailing market prices or at negotiated prices. We provide more information about how the selling stockholders may sell their Resale Shares in the section entitled "Plan of Distribution."

We will bear all costs, expenses and fees in connection with the registration of the Resale Shares. The selling stockholders will bear all commissions and discounts, if any, attributable to their respective sales of the Resale Shares.

Our Common Stock is listed on the Nasdaq Capital Market ("Nasdaq") under the trading symbol "JSPR." On October 13, 2026, the last reported sale price of our Common Stock was \$0.4956 per share.

We are a "smaller reporting company" as that term is defined in Rule 12b-2 promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings with the Securities and Exchange Commission. See "Prospectus Summary—Implications of Being a Smaller Reporting Company."

***Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" on page 6 of this prospectus and any applicable prospectus supplement, and under similar headings in the 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.**

---

## TABLE OF CONTENTS

|                                                                             | <b>Page</b> |
|-----------------------------------------------------------------------------|-------------|
| <a href="#"><u>ABOUT THIS PROSPECTUS</u></a>                                | ii          |
| <a href="#"><u>CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS</u></a> | iii         |
| <a href="#"><u>PROSPECTUS SUMMARY</u></a>                                   | 1           |
| <a href="#"><u>THE OFFERING</u></a>                                         | 5           |
| <a href="#"><u>RISK FACTORS</u></a>                                         | 6           |
| <a href="#"><u>USE OF PROCEEDS</u></a>                                      | 7           |
| <a href="#"><u>DESCRIPTION OF CAPITAL STOCK</u></a>                         | 8           |
| <a href="#"><u>SELLING STOCKHOLDERS</u></a>                                 | 13          |
| <a href="#"><u>PLAN OF DISTRIBUTION</u></a>                                 | 19          |
| <a href="#"><u>LEGAL MATTERS</u></a>                                        | 21          |
| <a href="#"><u>EXPERTS</u></a>                                              | 21          |
| <a href="#"><u>WHERE YOU CAN FIND ADDITIONAL INFORMATION</u></a>            | 21          |
| <a href="#"><u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u></a>    | 22          |

We have not, nor has any selling stockholder, authorized any dealer, salesperson or other person to give any information or to make any representation other than those contained in or incorporated by reference into this prospectus or any applicable free writing prospectus. You must not rely upon any information or representation not contained in or incorporated by reference into this prospectus or any applicable free writing prospectus as if we had authorized it. This prospectus and any applicable free writing prospectus do not constitute an offer to sell or the solicitation of any offer to buy any securities other than the registered securities to which they relate, nor does this prospectus or any applicable free writing prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus, the documents incorporated herein and therein by reference and any applicable free writing prospectus is correct on any date after their respective dates, even though this prospectus or an applicable free writing prospectus is delivered or securities are sold on a later date. Our business, financial condition, results of operations and cash flows may have changed since those dates.

## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “SEC”) under the Securities Act of 1933, as amended (the “Securities Act”), utilizing a “shelf” registration process, 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. This prospectus describes the specific terms of this offering. We urge you to carefully read this prospectus and the documents incorporated by reference herein and therein, before buying any of the securities being offered under this prospectus. To the extent that any statement that we make in this prospectus is inconsistent with statements made in any documents incorporated by reference herein filed prior to the date of this prospectus, the statements made in this prospectus will be deemed to modify or supersede those made in such documents incorporated by reference herein.

In this prospectus, unless the context otherwise requires, the terms (i) “Kira” refers to Kira Pharmaceuticals, a Cayman Islands exempted company; (ii) “Merger Sub” refers to Kira Holdco Inc., a Delaware corporation and a wholly owned subsidiary of Jasper Therapeutics, Inc.; (iii) “Merger Agreement” refers to the Agreement and Plan of Merger, dated July 16, 2026, by and among Jasper Therapeutics, Inc., Kira and Merger Sub; (iv) “Merger” refers to the merger of Kira with and into Merger Sub pursuant to the Merger Agreement, with Merger Sub surviving as a wholly owned subsidiary of Jasper Therapeutics, Inc.; and (v) “we,” “us,” “our,” “Jasper,” the “Company” and other similar terms refer to the business and operations of Jasper Therapeutics, Inc. and its consolidated subsidiaries for periods prior to the Merger and to Jasper Therapeutics, Inc. and its consolidated subsidiaries, including Merger Sub, for periods after the Merger.

You should rely only on the information contained in this prospectus and any related free-writing prospectus that we or the selling stockholders provide to you or incorporated herein by reference in this prospectus. Neither we nor the selling stockholders have authorized anyone to provide you with different or additional information. If anyone provides you with different, additional or inconsistent information, you should not rely on it.

The selling stockholders are offering to sell securities only in jurisdictions where such offers and sales are permitted. The distribution of this prospectus and the offering of the securities in certain jurisdictions or to certain persons within such jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus must inform themselves about and observe any restrictions relating to the offering of the securities and the distribution of this prospectus outside the United States. This prospectus does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

You should assume that the information in this prospectus is accurate only as of the date on the front cover and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus and the documents incorporated by reference herein when making your investment decision. You should also read and consider the information in the documents we have referred you to in the sections of this prospectus entitled “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference.”

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

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 herein 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.

## CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained in this prospectus, including the documents incorporated by reference in this prospectus, may constitute “forward-looking statements” for purposes of federal securities laws. These forward-looking statements are intended to be covered by the safe harbor for forward-looking statements provided by the Private Securities Litigation Reform Act of 1995. Such statements can be identified by the fact that they do not relate strictly to historical or current facts. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. The words “*anticipate*,” “*believe*,” “*contemplate*,” “*continue*,” “*could*,” “*estimate*,” “*expect*,” “*intends*,” “*may*,” “*might*,” “*plan*,” “*possible*,” “*potential*,” “*predict*,” “*project*,” “*should*,” “*will*,” “*would*” and similar expressions (including the negative of any of the foregoing) may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking.

Forward-looking statements in this prospectus and the documents incorporated by reference in this prospectus may include, for example, but are not limited to, statements about:

- our or our management team’s expectations, hopes, beliefs, intentions or strategies regarding the future;
- our ability to research, discover and develop additional product candidates;
- the success, cost and timing of our product development activities and clinical trials;
- the potential attributes and benefits and safety and efficacy of our product candidates;
- our ability to obtain and maintain regulatory approval for our product candidates;
- our ability to obtain additional funding for our operations in future offerings;
- our projected financial information, anticipated growth rate and market opportunity;
- our public securities’ potential liquidity and trading;
- our success in retaining or recruiting, or changes required in, officers, key employees or directors;
- our ability to grow and manage growth profitably;
- the implementation, market acceptance and success of our business model, developments and projections relating to our competitors and industry;
- our ability to obtain and maintain intellectual property protection and not infringe on the rights of others;
- our ability to identify, in-license or acquire additional technology;
- our ability to maintain our existing license agreements and manufacturing arrangements;
- our expectations regarding the anticipated benefits of our corporate reorganization, including the reduction in force, and our ability to implement and achieve the expected cost savings in connection therewith;
- our ability to continue as a going concern;

- the volatility of the trading price of our Common Stock;
- our ability to successfully integrate the operations and personnel of Kira and realize the anticipated benefits of the Merger; and
- our expectations regarding the development, clinical timelines and therapeutic potential of KP-104, briquilimab, KP-701 and our other product candidates following the Merger.

We caution you that the foregoing list may not contain all the forward-looking statements made in this prospectus or in the documents incorporated by reference in this prospectus.

These forward-looking statements are based on current expectations and beliefs concerning future developments and their potential effects. There can be no assurance that future developments affecting us will be those that we have anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those factors described under the heading “Risk Factors” in this prospectus, in our Annual Report on Form 10-K for the year ended December 31, 2025, as filed with the SEC on March 30, 2026, as updated by our subsequent annual, quarterly and other reports and documents that are incorporated by reference into this prospectus, and elsewhere in the documents incorporated by reference into this prospectus. Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. There may be additional risks that we consider immaterial or which are unknown. It is not possible to predict or identify all such risks. Readers are cautioned not to place undue reliance on forward-looking statements because of the risks and uncertainties related to them and to the risk factors. We do not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise after the date of this prospectus, except as may be required under applicable securities laws. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, other strategic transactions or investments we may make or enter into.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of the statement is made, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and such statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

## PROSPECTUS SUMMARY

*This summary highlights certain information about us, this offering and selected information contained elsewhere in, or incorporated by reference into this prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our Common Stock. For a more complete understanding of our company and this offering, we encourage you to read and carefully consider the more detailed information in this prospectus, the applicable prospectus supplements and any related free writing prospectus, including the risks of investing in our Common Stock discussed under the sections entitled “Risk Factors” contained in this prospectus, the applicable prospectus supplements and any related free writing prospectuses and under similar sections in the other documents that are incorporated by reference into this prospectus. You should also carefully consider the other information incorporated by reference into this prospectus, including our financial statements and related notes, and the exhibits to the registration statement of which this prospectus forms a part.*

### Overview

Jasper Therapeutics is a clinical-stage biotechnology company focused on advancing a consolidated pipeline of biologic agents designed to improve outcomes in patients with immunologically-driven disorders. Our consolidated pipeline includes KP-104, a bifunctional biologic targeting the treatment of PNH and high unmet need nephrology disorders; briquilimab, an anti-KIT antibody with therapeutic utility across multiple transplant and immunologic indications; KP-701, a dual-acting anti-CD79BxCD32B monoclonal antibody for autoantibody-mediated disorders; and discovery-stage programs in long-acting complement-targeted biologics.

#### **KP-104 (vensobafusp alfa)**

KP-104 is a Phase 2/3 ready, bifunctional biologic targeting both the alternative and terminal pathways within the complement cascade. We believe this dual mechanism addresses both upstream complement activation and downstream lytic damage, and may offer advantages relative to therapies targeting a single complement pathway. KP-104 is being evaluated in an ongoing Phase 2 basket trial in rare renal indications, with initial cohorts in IgA nephropathy (“IgAN”) and C3 glomerulopathy (“C3G”) and potential expansion into focal segmental glomerulosclerosis (“FSGS”) and other renal disorders. We expect to report interim data from Stage 1 of the ongoing Phase 2 basket trial in the fourth quarter of 2026 and updated data in the second quarter of 2027, and we plan to report interim data from Stage 2 of the study in the second quarter of 2027. Based on previous positive data in treatment-naïve PNH, we are planning for an end-of-Phase 2 meeting with the FDA and plan to announce next steps in the first half of 2027. By the end of 2026, we anticipate that we will announce a new indication for KP-104.

#### **Briquilimab**

Briquilimab is a targeted aglycosylated anti-KIT monoclonal antibody that blocks stem cell factor (“SCF”) from binding to the CD117 (“KIT”) receptor, inhibiting an essential survival signal for mast cells and a maintenance signal for hematopoietic stem cells, with therapeutic utility across multiple transplant and immunologic indications. Following positive, long-term data in severe combined immunodeficiency (“SCID”), we are progressing our efforts towards a pre-Biologics License Application (“BLA”) meeting with the FDA and expect to announce next steps in the first quarter of 2027. Briquilimab has received Orphan Drug Designation, Fast Track Designation and Rare Pediatric Disease Designation in SCID and, if approved, may be eligible for a priority review voucher. We also continue to assess the mast cell mediated disease landscape and will provide an update on our anticipated clinical development in the second half of 2026.

#### **KP-701**

KP-701 is a preclinical, dual-acting anti-CD79BxCD32B monoclonal antibody targeting the B-cell receptor, designed to suppress B-cell function and reduce cytokine and autoantibody production without antibody-dependent cellular cytotoxicity or complement-dependent cytotoxicity, in development for autoantibody-mediated disorders. In the first quarter of 2027, we expect to file a clinical trial application (“CTA”) or an investigational new drug application (“IND”) for Phase 1 testing, and we plan to report first-in-human data in the third quarter of 2027.

#### **Discovery Programs**

We are advancing discovery-stage programs in long-acting complement-targeted biologics for autoimmune inflammatory disorders, with development candidate selection expected in mid-2027.

## ***License and Collaboration Agreements***

We have an exclusive license agreement with Amgen for the development and commercialization of the briquilimab monoclonal antibody in all indications and territories worldwide. We also have an exclusive license agreement with Stanford University for the right to use briquilimab in the clearance of diseased stem cells prior to the transplantation of hematopoietic stem cells.

On July 13, 2026, prior to the Merger, Kira entered into a license agreement (the “Mirador License Agreement”) with Mirador Therapeutics, Inc. (“Mirador”), pursuant to which Kira granted Mirador an exclusive, worldwide, royalty-bearing license, with the right to grant sublicenses, under certain patents and know-how controlled by Kira to develop, manufacture and commercialize products containing Kira’s anti-C5a monoclonal antibody (KP-301) and anti-C5aR small molecule compound (KP-402) for all uses and indications. In consideration for the license, Mirador agreed to pay an upfront payment of \$12.0 million and a payment of \$8.0 million upon delivery of drug substance and compound to Mirador, and is obligated to pay up to an aggregate of \$108.5 million in development and regulatory milestone payments and up to an aggregate of \$350.0 million in commercial, net sales-based milestone payments, together with tiered royalties on annual net sales ranging from low to mid-single digits. Out-licensing these assets allows us to focus our resources on our current portfolio of high-value immunology targets.

## **Recent Developments**

### ***Acquisition of Kira Pharmaceuticals and Private Placement***

On July 16, 2026 (the “Merger Closing”), we acquired Kira, pursuant to the terms of the Merger Agreement, by and among us, Kira and Kira Holdco Inc., a Delaware corporation and our wholly owned subsidiary (“Merger Sub”). Pursuant to the Merger Agreement, Kira merged with and into Merger Sub, with Merger Sub surviving the merger and becoming our wholly owned subsidiary. The Merger is intended to qualify as a tax-free reorganization for U.S. federal income tax purposes. The consummation of the Merger did not require the approval of our stockholders.

As consideration for the Merger, we issued to the shareholders of Kira an aggregate of 5,195,009 shares of our voting common stock, par value \$0.0001 per share (the “Common Stock”), and 4,644,977 shares of non-voting convertible preferred stock, par value \$0.0001 per share (the “Preferred Stock”), each share of which is convertible into 61 shares of Common Stock (such ratio, as it may be adjusted, the “Conversion Ratio”), subject to stockholder approval and certain other conditions. Pursuant to the Merger Agreement, each simple agreement for future equity issued by Kira to certain investors and outstanding immediately prior to the effective time of the Merger (each, a “Kira SAFE”) was terminated and cancelled in accordance with its terms and, in consideration therefor, the holders of the Kira SAFEs received an aggregate of 254,462 shares of Preferred Stock. In addition, each option to purchase Kira ordinary shares was assumed by us and converted into options to purchase an aggregate of 392,791 shares of Common Stock and an aggregate of 351,201 shares of Preferred Stock. Shares of Common Stock, options and warrants held by our stockholders immediately prior to the effective time of the Merger remain outstanding and were unaffected by the Merger.

Concurrently with the execution of the Merger Agreement, we entered into a securities purchase agreement with certain investors, pursuant to which we agreed to sell an aggregate of 4,655,951 shares of Preferred Stock (the “PIPE Preferred Stock”) for aggregate gross proceeds of approximately \$132.0 million (the “Financing”). The closing of the Financing occurred on July 20, 2026.

Concurrently with the execution of the securities purchase agreement, we also entered into a registration rights agreement, dated July 16, 2026 (the “Registration Rights Agreement”), with the investors in the Financing, pursuant to which we are required to prepare and file with the SEC a resale registration statement with respect to the shares of Common Stock issuable upon conversion of the shares of Preferred Stock sold in the Financing within 90 calendar days following the closing of the Financing (the “Filing Deadline”). We have agreed to use commercially reasonable efforts to cause such registration statement to be declared effective by the SEC by the thirtieth calendar day (or, in the event the SEC reviews the registration statement, the sixtieth calendar day) following the earlier of the Filing Deadline and the date the registration statement is filed with the SEC; provided, however, that if we are notified by the SEC that the registration statement will not be reviewed or is no longer subject to further review and comments, such deadline will be the fifth trading day following the date on which we are so notified. We are filing the registration statement of which this prospectus forms a part in order to satisfy our obligations under the Registration Rights Agreement. The foregoing description of the Registration Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the form of Registration Rights Agreement, which is incorporated herein by reference.

Concurrently and in connection with the Merger, directors and executive officers of Kira, solely in their capacity as shareholders of Kira, certain stockholders of Kira, and all of our directors and officers, solely in their capacity as our stockholders, entered into lock-up agreements (the “Lock-Up Agreements”) with us, pursuant to which each such stockholder is subject to a lockup on the sale or transfer of shares of Common Stock and Preferred Stock held by each such stockholder as of the Merger Closing for a period of 180 days after the Merger Closing. The Lock-Up Agreements also provide that such restrictions will be terminated upon the termination of such party’s employment or service as a director with the Company.

Immediately following the consummation of the Merger, but prior to giving effect to the Financing, our pre-transaction stockholders held approximately 11.27%, and former shareholders of Kira held approximately 88.73%, of our Common Stock, in each case calculated on a fully-diluted basis (without giving effect to any beneficial ownership limitations and assuming the conversion in full of the Preferred Stock). Following the consummation of the Financing, our pre-transaction stockholders hold approximately 6.68%, former shareholders of Kira hold approximately 49.86%, and the investors in the Financing hold approximately 43.46%, of our Common Stock, calculated on the same basis. As of September 28, 2026, there were 33,274,561 shares of Common Stock and 9,555,390 shares of Preferred Stock outstanding. If all outstanding shares of Preferred Stock were converted as of that date, there would be a total of approximately 616,153,351 shares of Common Stock outstanding.

Pursuant to the terms of the Merger Agreement, we entered into a contingent value rights agreement (the “CVR Agreement”) with Continental Stock Transfer & Trust Company, as rights agent, pursuant to which each holder of record of our Common Stock immediately prior to the effective time of the Merger received one contractual contingent value right (a “CVR”) for each share of Common Stock held by such holder. Each CVR entitles the holder to receive a pro rata portion of an aggregate \$30.0 million payment if the FDA issues a priority review voucher in connection with briquilimab on or prior to December 31, 2028, payable following a monetization event or a change of control, in each case as provided in the CVR Agreement. The CVRs are not transferable, except in certain limited circumstances as provided in the CVR Agreement, are not certificated and have not been and will not be registered with the SEC or listed for trading on any exchange.

We have agreed to convene a special meeting of our stockholders within 120 days following the Merger Closing to seek approval of, among other matters, the issuance of shares of Common Stock upon conversion of the Preferred Stock in accordance with the rules of The Nasdaq Stock Market LLC (the “Preferred Conversion Stockholder Approval”) and such other matters as may be necessary to ensure the number of authorized shares of Common Stock available is sufficient to permit the conversion of all Preferred Stock issued or reserved for issuance in connection with the Merger and the Financing. On the third business day following receipt of the Preferred Conversion Stockholder Approval, each share of Preferred Stock will automatically convert into a number of shares of Common Stock equal to the Conversion Ratio, subject to beneficial ownership limitations (the “Beneficial Ownership Limitation”), in each case in accordance with the Certificate of Designation of Preferences, Rights and Limitations of Non-Voting Convertible Preferred Stock filed by us with the Secretary of State of the State of Delaware (the “Certificate of Designation”). If we fail to deliver shares of Common Stock upon conversion of the Preferred Stock following the earlier of receipt of the Preferred Conversion Stockholder Approval and the twelve-month anniversary of the initial issuance of the Preferred Stock, holders of Preferred Stock may require us to pay cash equal to the fair value of the undelivered shares.

### ***September Special Meeting***

On September 30, 2026, at a special meeting of the Company’s stockholders (the “September Special Meeting”), the Company’s stockholders approved an amendment (the “Reverse Stock Split Amendment”) to the Company’s Second Amended and Restated Certificate of Incorporation (as amended, the “Certificate of Incorporation”) to effect, in the sole discretion of the board of directors of the Company (the “Board”) at any time on or before December 31, 2026, a reverse stock split of the Company’s Common Stock at a ratio ranging from 1-for-15 to 1-for-35 (or any number in between), with the specific ratio and timing to be determined by the Board. As of the date of this prospectus, the Board has not selected a ratio, nor has it filed or otherwise effected the Reverse Stock Split Amendment.

At the September Special Meeting, stockholders also approved an amendment to the Certificate of Incorporation to increase the number of authorized shares of Common Stock from 490,000,000 to 675,000,000 (the “Authorized Shares Amendment”), which may be effected in the sole discretion of the Board. As of the date of this prospectus, the Board has not filed or otherwise effected the Authorized Shares Amendment.

## **Funding Requirements and Going Concern**

We have incurred significant losses and negative cash flows from operations since our inception. As of June 30, 2026, the Company had an accumulated deficit of \$320.6 million. Given our recurring losses from operations and negative cash flows, the potential risk of having to repurchase the Preferred Stock issued in the Financing if we are unable to obtain the Preferred Conversion Stockholder Approval within twelve months of the initial issuance of the Preferred Stock, and based on our current operating plan, we concluded that there is substantial doubt about our ability to continue as a going concern within one year from the date of filing of our Quarterly Report on Form 10-Q for the quarter ended June 30, 2026. Our consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Our future viability as an ongoing business is dependent on our ability to generate cash from our operating activities or to raise additional capital to finance our operations. We expect to finance our future cash needs through equity financing, debt financings, collaborations or a combination of these approaches, and given the imminent need for additional funding to continue to fund operations in the near-term, we are actively seeking additional capital to extend our cash runway. The sale of equity or convertible debt securities may result in dilution to our stockholders, and, in the case of preferred equity securities or convertible debt, those securities could provide for rights, preferences or privileges senior to those of our Common Stock. Debt financings may subject us to covenant limitations or restrictions on our ability to take specific actions, such as incurring additional debt or making capital expenditures. Our ability to raise additional funds may be adversely impacted by negative global economic conditions and any disruptions to and volatility in the credit and financial markets in the United States and worldwide or other factors. There can be no assurance that we will be successful in acquiring additional funding at levels sufficient to fund our operations or on terms favorable or acceptable to us. While we routinely evaluate cost reduction measures to proactively manage cash burn, if we are unable to obtain adequate financing when needed or on terms favorable or acceptable to us, we may be forced to take broader actions such as to delay, reduce the scope of or eliminate one or more of our research and development programs.

## **Corporate Information**

We were incorporated under the name “Amplitude Healthcare Acquisition Corporation” on August 13, 2019 as a Delaware corporation for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or similar business combination with one or more businesses. On September 24, 2021, we consummated a business combination (the “Business Combination”) and changed our name to “Jasper Therapeutics, Inc.” On July 16, 2026, we completed the Merger. For more information about the Merger and related transactions, see the section of this prospectus titled “Prospectus Summary—Recent Developments.”

Our principal executive offices are located at 2200 Bridge Pkwy Suite #102, Redwood City, CA 94065, and our telephone number is (650) 549-1400. Our website address is [www.jaspertherapeutics.com](http://www.jaspertherapeutics.com). Any information contained on, or that can be accessed through, our website is not incorporated by reference into, nor is it in any way part of this prospectus and should not be relied upon in connection with making any decision with respect to an investment in our securities. We are required to file annual, quarterly and current reports, proxy statements and other information with the SEC. You may obtain any of the documents filed by us with the SEC at no cost from the SEC’s website at <http://www.sec.gov>.

## **Implications of Being a Smaller Reporting Company**

We are a “smaller reporting company” as defined in Rule 12b-2 promulgated under the Exchange Act, meaning that our annual revenue was less than \$100.0 million during the most recently completed fiscal year and the market value of our Common Stock held by non-affiliates was less than \$700.0 million measured on the last business day of our second fiscal quarter. Accordingly, we may provide certain reduced disclosures available to smaller reporting companies, and the information that we provide to our stockholders may be different than information you might receive from other public reporting companies.

We will qualify as a smaller reporting company until the fiscal year following the determination that the market value of our stock held by non-affiliates is more than \$250 million measured on the last business day of our second fiscal quarter, or if our annual revenues are less than \$100 million during the most recently completed fiscal year, until the fiscal year following the determination that the market value of our stock held by non-affiliates is more than \$700 million measured on the last business day of our second fiscal quarter.

We have elected to take advantage of certain of the reduced disclosure obligations regarding executive compensation in this prospectus and may elect to take advantage of other reduced reporting requirements in future filings with the SEC. As a result, the information that we provide to our stockholders may be different from the information you receive from other public reporting companies.

## THE OFFERING

|                                                                   |                                                                                                                                                                            |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shares of Common Stock offered by the selling stockholders</b> | We are registering the resale by the selling stockholders of up to an aggregate of 284,013,011 Resale Shares issuable upon conversion of the PIPE Preferred Stock.         |
| <b>Terms of the offering</b>                                      | Each selling stockholder will determine when and how it will sell the Common Stock offered in this prospectus, as described in “Plan of Distribution.”                     |
| <b>Use of proceeds</b>                                            | We will not receive any of the proceeds from the sale of the Resale Shares in this offering. The selling stockholders will receive all of the proceeds from this offering. |
| <b>Risk Factors</b>                                               | See “Risk Factors” beginning on page 6 for a discussion of factors you should carefully consider before deciding to invest in our Common Stock.                            |
| <b>Nasdaq ticker symbol for Common Stock</b>                      | “JSPR”                                                                                                                                                                     |

## RISK FACTORS

*Investing in our securities involves a high degree of risk. Before you make a decision to buy our securities, in addition to the risks and uncertainties discussed above under “Cautionary Note Regarding Forward-Looking Statements”, you should carefully consider the specific factors discussed below and the risks and uncertainties described under the section titled “Risk Factors” contained in our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q, as filed with the SEC, which are incorporated by reference herein in their entirety, together with all of the other information appearing in or incorporated by reference into this prospectus, as updated by our subsequent filings with the SEC, as well as the risk factors and other information contained in any applicable prospectus supplement and any applicable free writing prospectus before deciding to invest in our securities. If any of these risks actually occur, it may materially harm our business, financial condition, liquidity and results of operations. Additionally, the risks and uncertainties described in this prospectus, any prospectus supplement, any free writing prospectus, any post-effective amendment or in any filing or document incorporated by reference herein or therein are not the only risks and uncertainties that we face. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may become material and adversely affect our business. For more information, see the below section “Where You Can Find Additional Information.” Please also read carefully the above section “Cautionary Note Regarding Forward-Looking Statements.”*

### **Risks Relating to this Offering**

#### ***Conversion of the Preferred Stock is contingent on stockholder approval that has not yet been obtained.***

The conversion of the Preferred Stock into Common Stock is subject to receipt of the Preferred Conversion Stockholder Approval, which has not yet been obtained. We expect to convene a special meeting of the Company’s stockholders to seek such approval. There can be no assurance that the Preferred Conversion Stockholder Approval will be obtained at any such meeting of the Company’s stockholders. If the Preferred Conversion Stockholder Approval is not obtained, the Preferred Stock will not be convertible into Common Stock, the Resale Shares registered under this prospectus will not be issuable, and the selling stockholders will not be able to resell shares of Common Stock under this prospectus. In addition, if we fail to deliver shares of Common Stock upon conversion of the Preferred Stock following the earlier of receipt of the Preferred Conversion Stockholder Approval and the twelve-month anniversary of the initial issuance of the Preferred Stock, holders of Preferred Stock may require us to pay cash equal to the fair value of the undelivered shares, which could have a material adverse effect on our financial condition and liquidity.

#### ***Resales of our Common Stock in the public market by our stockholders as a result of this offering may cause the market price of our Common Stock to fall.***

We are registering the Resale Shares for resale by the selling stockholders. Sales of substantial amounts of our Common Stock in the public market, or the perception that such sales might occur, could adversely affect the market price of our Common Stock. The issuance of shares of Common Stock upon conversion of the Preferred Stock could result in resales of our Common Stock by our current stockholders concerned about the potential ownership dilution of their holdings. Furthermore, in the future, we may issue additional shares of Common Stock or other equity or debt securities exercisable or convertible into Common Stock. Any such issuance could result in substantial dilution to our existing stockholders and could cause our stock price to decline.

#### ***The number of shares being registered for resale is significant in relation to the number of our outstanding shares of Common Stock.***

We have filed the registration statement of which this prospectus forms a part to register the shares offered hereunder for sale into the public market by the selling stockholders. These shares represent a large number of shares of our outstanding shares of Common Stock, and if sold in the market all at once or at about the same time, could depress the market price of our Common Stock during the period the registration statement remains effective and could also affect our ability to raise equity capital.

#### ***We have additional securities available for issuance, which, if issued, could adversely affect the rights of the holders of our Common Stock.***

We may from time to time issue additional shares of Common Stock or other securities exercisable for, or convertible into, shares of Common Stock. We have a substantial number of convertible securities outstanding. In addition, as opportunities present themselves, we may enter into financing or similar arrangements in the future, which may provide for the issuance of debt securities or shares of Common Stock, preferred stock or other securities. Any future issuances of Common Stock or securities exercisable for, or convertible into, shares of our Common Stock, including upon the exercise of any outstanding warrants or options, the vesting of restricted stock awards, would further dilute the percentage ownership of us held by holders of Common Stock and may have a negative effect on the price of our Common Stock. In addition, the issuance of certain securities may be used as an “anti-takeover” device without further action on the part of our stockholders, and may adversely affect the holders of our Common Stock.

## USE OF PROCEEDS

The selling stockholders will receive all of the net proceeds from the sale of our securities in this offering. We will not receive any proceeds from the sale of our securities by the selling stockholders. The selling stockholders will bear the expenses incurred for brokerage, accounting, tax services, or any other expenses incurred by the selling stockholders. We will, or will procure to, bear all other costs, fees, and expenses incurred in effectuating the registration of the securities covered by this prospectus, including, without limitation, all registration and filing fees, and fees and expenses of our counsel and our independent registered public accountants. See “*Selling Stockholders*.”

## DESCRIPTION OF CAPITAL STOCK

The following summary of certain provisions of our capital stock does not purport to be complete and is subject to our Certificate of Incorporation, our third amended and restated bylaws (the “Bylaws”), the Certificate of Designation and the provisions of applicable law. A copy of our Certificate of Incorporation, a copy of our Bylaws and a copy of the Certificate of Designation are filed or incorporated by reference as exhibits to the registration statement of which this prospectus is a part. The summary below is also qualified by reference to the provisions of the General Corporation Law of the State of Delaware (“DGCL”), as applicable.

### **Authorized and Outstanding Stock**

Our Certificate of Incorporation authorizes the issuance of 490,000,000 shares of Common Stock, 2,000,000 shares of non-voting common stock (the “Non-Voting Common Stock”), and 10,000,000 shares of undesignated preferred stock, of which 9,906,591 shares have been designated as the Preferred Stock. As of September 28, 2026, we had 33,274,561 shares of Common Stock outstanding, no shares of Non-Voting Common Stock outstanding, and 9,555,390 shares of Preferred Stock outstanding.

### **Common Stock**

Under our Certificate of Incorporation, holders of our Common Stock and our Non-Voting Common Stock have identical rights other than with respect to voting and conversion rights, each as described below.

#### ***Voting Power***

Except as otherwise expressly provided in our Certificate of Incorporation or as required by applicable law, on any matter that is submitted to a vote by our stockholders, holders of our Common Stock are entitled to one vote per share of Common Stock, and holders of Non-Voting Common Stock shall not be entitled to any votes per share of Non-Voting Common Stock, including for the election of directors.

#### ***Conversion Rights***

Holders of Common Stock do not have conversion rights, while holders of Non-Voting Common Stock shall have the right to convert each share of Non-Voting Common Stock held by such holder into one share of Common Stock at such holder’s election by providing written notice to us, provided that as a result of such conversion, such holder, together with its affiliates and any members of a Schedule 13(d) group with such holder, would not beneficially own in excess of 9.9% of our Common Stock following such conversion. However, this ownership limitation may be increased to any other percentage designated by such holder of our Non-Voting Common Stock (and applicable only to such holder) upon 61 days’ prior written notice to us or decreased to any other percentage designated by such holder of our Non-Voting Common Stock (and applicable only to such holder) at any time upon prior written notice to us. Holders of our Non-Voting Common Stock are also permitted to make certain transfers to non-affiliates upon which such transferred shares would immediately convert to shares of our Common Stock upon the written request of the original holder and the written certification from the transferee holder of its non-affiliation with the original holder of such Non-Voting Common Stock.

#### ***Dividends***

Holders of our Common Stock are entitled to receive ratably any dividends declared by our Board or a committee thereof out of funds legally available for that purpose, subject to any preferential dividend rights of any then outstanding preferred stock. Our Common Stock does not have preemptive rights or other subscription rights or redemption or sinking fund provisions.

#### ***Liquidation, Dissolution and Winding Up***

In the event of our voluntary or involuntary liquidation, dissolution or winding up, our net assets will be distributed pro rata to the holders of our Common Stock, subject to any liquidation preference of any then outstanding preferred stock. The holders of Non-Voting Common Stock rank on parity with holders of Common Stock as to such distributions.

#### ***Election of Directors***

Our Board is divided into three classes, Class I, Class II and Class III, with only one class of directors being elected in each year and each class serving a three-year term. There is no cumulative voting with respect to the election of directors.

## Preferred Stock

Our Certificate of Incorporation provides that shares of our preferred stock may be issued from time to time in one or more series. Our Board is authorized to fix the number of shares applicable to any such series of preferred stock and to determine or alter for each such series, such voting powers, full or limited, or no voting powers, and such designation, preferences, and relative, participating, optional or other rights and such qualifications, limitations or restrictions thereof. Our Board will be able to, without stockholder approval, issue preferred stock with voting and other rights that could adversely affect the voting power and other rights of the holders of our Common Stock and could have anti-takeover effects. The ability of our Board to issue preferred stock without stockholder approval could have the effect of delaying, deferring or preventing a change of control of our Company or the removal of existing management. Pursuant to this authority, our Board has designated one series of preferred stock, the Non-Voting Convertible Preferred Stock, the terms of which are described below.

### *Non-Voting Convertible Preferred Stock*

The Resale Shares offered by this prospectus are issuable upon conversion of the PIPE Preferred Stock. The designations, powers, preferences and relative, participating, optional and other special rights of the Preferred Stock, and the qualifications, limitations and restrictions thereof, are set forth in the Certificate of Designation. The following summarizes the material terms of the Preferred Stock.

*Voting.* Except as otherwise required by law, the Preferred Stock has no voting rights. So long as any shares of Preferred Stock remain outstanding, however, we may not, without the affirmative vote of the holders of a majority of the outstanding shares of Preferred Stock, take certain actions specified in the Certificate of Designation, including altering or amending the Certificate of Designation or amending, waiving or modifying the Merger Agreement in any manner that would be reasonably likely to prevent, impede or materially delay the Preferred Conversion Stockholder Approval or the automatic conversion of the Preferred Stock.

*Dividends.* Holders of Preferred Stock are entitled to receive dividends on shares of Preferred Stock, on an as-if-converted-to-Common-Stock basis and without regard to the Beneficial Ownership Limitation, equal to and in the same form, and in the same manner, as dividends (other than dividends on shares of Common Stock payable in the form of Common Stock) actually paid on shares of Common Stock, when, as and if such dividends are paid on shares of Common Stock. Holders of Preferred Stock are not entitled to receive the rights distributed pursuant to the contingent value rights agreement governing the CVRs, or any amounts paid thereunder.

*Rank; Liquidation.* The Preferred Stock ranks on parity with the Common Stock as to distributions of assets upon our liquidation, dissolution or winding up. Upon any such liquidation, each holder of Preferred Stock is entitled to receive, *pari passu* with payment to holders of Common Stock, the same amount that a holder of Common Stock would receive if the Preferred Stock were fully converted into Common Stock at the Conversion Ratio, disregarding any Beneficial Ownership Limitation, plus any dividends declared but unpaid on such shares.

*Automatic Conversion.* Effective as of 5:00 p.m. Eastern time on the third business day after the date on which the Preferred Conversion Stockholder Approval is obtained, each share of Preferred Stock then outstanding will automatically convert into a number of shares of Common Stock equal to the Conversion Ratio, subject to the Beneficial Ownership Limitation. In no event will the Preferred Stock convert into Common Stock prior to receipt of the Preferred Conversion Stockholder Approval, which has not yet been obtained.

*Optional Conversion; Adjustments.* Following the earlier of the third business day after receipt of the Preferred Conversion Stockholder Approval and, solely for purposes of effecting a cash settlement as described below, the twelve-month anniversary of the initial issuance of the Preferred Stock, each share of Preferred Stock is convertible at the option of the holder into a number of shares of Common Stock equal to the Conversion Ratio. The Conversion Ratio is subject to adjustment as provided in the Certificate of Designation, including for stock dividends, stock splits and reverse stock splits. No fractional shares of Common Stock will be issued upon conversion.

*Beneficial Ownership Limitation.* A holder of Preferred Stock may not convert shares of Preferred Stock into Common Stock to the extent that, after giving effect to the conversion, such holder, together with its affiliates and other attribution parties, would beneficially own shares of Common Stock in excess of the Beneficial Ownership Limitation applicable to such holder, calculated as a percentage of the shares of Common Stock outstanding immediately after giving effect to such conversion. The Beneficial Ownership Limitation is initially between 4.9% and 19.9%, with each holder having the discretion to set the applicable percentage within that range. A holder may increase its Beneficial Ownership Limitation to a higher percentage, not to exceed 19.9%, effective on the 61st day after written notice to us, and may decrease it effective immediately upon written notice to us. Any shares of Preferred Stock that do not convert in the automatic conversion as a result of a holder's Beneficial Ownership Limitation will remain outstanding until converted at the holder's option.

**Cash Settlement.** If, at any time after the earlier of receipt of the Preferred Conversion Stockholder Approval and the twelve-month anniversary of the initial issuance of the Preferred Stock, a holder delivers a notice of conversion and we fail to deliver the underlying shares of Common Stock by the third trading day after the applicable share delivery date, then, subject to certain exceptions, we are required, at the holder's request, to pay cash equal to the fair value of the undelivered shares, whereupon our obligation to deliver those shares is extinguished. Fair value for this purpose is the last reported closing sale price of a share of Common Stock on the trading day immediately prior to the date the notice of conversion is delivered.

**Fundamental Transactions.** Upon specified mergers, consolidations, sales of all or substantially all of our assets, tender or exchange offers for more than 50% of the Common Stock and reclassifications of the Common Stock, in each case as described in the Certificate of Designation, a holder of Preferred Stock will be entitled to receive, upon any subsequent conversion and in lieu of shares of Common Stock, the same kind and amount of securities, cash or property that the holder would have been entitled to receive in such transaction had it held one share of Common Stock for each share of Common Stock that would otherwise have been issuable upon such conversion, disregarding any Beneficial Ownership Limitation.

**Redemption; Transfer.** The Preferred Stock is not redeemable. A holder may transfer shares of Preferred Stock, in whole or in part, together with the accompanying rights, without our consent, provided that the transfer complies with applicable securities laws. Any transferee will be subject to the Beneficial Ownership Limitation applicable to the transferor as of the time of the transfer.

## **Certain Anti-Takeover Provisions of our Charter Documents and Delaware Law**

### ***Special Meetings of Stockholders***

Our Bylaws provide that special meetings of stockholders may be called only by a majority vote of our Board, by the Chairman of our Board, or by our Chief Executive Officer. Our Bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

### ***Advance Notice Requirements for Stockholder Proposals and Director Nominations***

Our Bylaws provide that stockholders seeking to bring business before an annual meeting of stockholders, or to nominate candidates for election as directors at an annual meeting of stockholders, must provide timely notice of their intent in writing. To be timely under our Bylaws, a stockholder's notice will generally need to be received by the corporate secretary at our principal executive offices not later than 5:00 p.m. Pacific Time on the 90<sup>th</sup> day nor earlier than 5:00 p.m. Pacific Time on the 120<sup>th</sup> day prior to the first anniversary of the preceding year's annual meeting; provided, however, that in the event the date of the annual meeting is advanced more than 30 days prior to or delayed by more than 60 days after the anniversary of the preceding year's annual meeting, or if no annual meeting was held in the preceding year, notice by the stockholder to be timely must be so received not earlier than 5:00 p.m. Pacific Time on the 120<sup>th</sup> day prior to such annual meeting and not later than 5:00 p.m. Pacific Time on the later of the 90<sup>th</sup> day prior to such annual meeting and the 10<sup>th</sup> day following the day on which notice of the date of such annual meeting was mailed or public announcement of the date of such meeting is first made, whichever first occurs. Pursuant to Rule 14a-8 of the Exchange Act, stockholders seeking to have proposals included in our annual proxy statement must comply with the notice periods contained therein. Our Bylaws specify certain requirements as to the form and content of a stockholders' meeting. These provisions may preclude our stockholders from bringing matters before an annual meeting of stockholders or from making nominations for directors at an annual meeting of stockholders.

### ***Authorized but Unissued Shares***

The authorized but unissued Common Stock and preferred stock are available for future issuances without stockholder approval and could be utilized for a variety of corporate purposes, including future offerings to raise additional capital, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved Common Stock and preferred stock could render more difficult or discourage an attempt to obtain control of our company by means of a proxy contest, tender offer, merger or otherwise.

### ***Written Consent by Stockholders***

Our Certificate of Incorporation and our Bylaws provide that no action shall be taken by our stockholders except at an annual or special meeting of stockholders called in accordance with our Bylaws, and no action shall be taken by the stockholders by written consent or electronic transmission.

### ***Amendments to Certificate of Incorporation and Bylaws***

Our Certificate of Incorporation requires the affirmative vote of the holders of at least 50% of the voting power of all of the then-outstanding shares of our capital stock entitled to vote generally in the election of directors, voting together as a single class to alter, amend or appeal Articles V (regarding directors), VI (regarding indemnification), VII (exclusive forum) or VIII (regarding amendments of our Certificate of Incorporation) of our Certificate of Incorporation.

Our Bylaws provide that they may be adopted, amended, or repealed by our stockholders by the affirmative vote of the holders of at least 50% of the voting power of all of our then outstanding capital stock entitled to vote generally in the election of directors, voting together as a single class.

### ***Removal of Directors***

Our Certificate of Incorporation provides that, subject to the rights of any series of preferred stock, directors may be removed at any time, but only for cause and only by the affirmative vote of 50% of the voting power of all then outstanding capital stock entitled to vote generally at an election of directors, voting together as a single class.

### ***Exclusive Forum Selection***

Our Certificate of Incorporation and our Bylaws provide that the Court of Chancery of the State of Delaware is the sole and exclusive forum for the following claims or causes of actions or proceedings under Delaware statutory or common law: (i) any derivative action or claim brought on our behalf; (ii) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers or other employees to our company or our stockholders; (iii) any action or proceeding asserting a claim against us or any of our current or former directors, officers or other employees, arising out of or pursuant to any provision of the DGCL, our Certificate of Incorporation or our Bylaws; (iv) any action asserting a claim against us or any of our directors, officers, or other employees governed by the internal-affairs doctrine or otherwise related to our internal affairs; (v) any action or claim to interpret, apply, enforce or determine the validity of our Certificate of Incorporation or Bylaws; and (vi) any action or claim as to which the DGCL confers jurisdiction to the Court of Chancery of the State of Delaware, in all cases to the fullest extent permitted by law and subject to the court having personal jurisdiction over the indispensable parties named as defendants. Further, pursuant to our Certificate of Incorporation and Bylaws, these foregoing provisions would not apply to suits brought to enforce a duty or liability created by the Exchange Act, the Securities Act or any other claim for which the federal courts have exclusive jurisdiction. Any person or entity holding, owning or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to such provisions.

Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law in the types of lawsuits to which they apply, a court may determine that these provisions are unenforceable, and to the extent they are enforceable, the provisions may have the effect of discouraging lawsuits against our directors and officers, although our stockholders will not be deemed to have waived our compliance with federal securities laws and the rules and regulations thereunder. Additionally, we cannot be certain that a court will decide that these provisions are either applicable or enforceable, and if a court were to find the choice of forum provisions contained in our Certificate of Incorporation and our Bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, operating results and financial condition.

Our Certificate of Incorporation provides that the exclusive forum provision will be applicable to the fullest extent permitted by applicable law. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our Certificate of Incorporation and our Bylaws provide that the federal district courts of the United States are the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, including all causes of action asserted against any defendant named in such complaint.

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

We are subject to provisions of Section 203 of the DGCL regulating corporate takeovers under our Certificate of Incorporation. This statute prevents certain Delaware corporations, under certain circumstances, from engaging in a “business combination” with:

- a stockholder who owns 15% or more of our outstanding voting stock (otherwise known as an “interested stockholder”);
- an affiliate of an interested stockholder; or
- an associate of an interested stockholder, for three years following the date that the stockholder became an interested stockholder.

A “business combination” includes a merger or sale of more than 10% of our assets. However, the above provisions of Section 203 do not apply if:

- our Board approves the transaction that made the stockholder an “interested stockholder,” prior to the date of the transaction;
- after the completion of the transaction that resulted in the stockholder becoming an interested stockholder, that stockholder owned at least 85% of our voting stock outstanding at the time the transaction commenced, other than statutorily excluded shares of common stock; or
- on or subsequent to the date of the transaction, the initial business combination is approved by our Board and authorized at a meeting of our stockholders, and not by written consent, by an affirmative vote of at least two-thirds of the outstanding voting stock not owned by the interested stockholder.

Under certain circumstances, this provision will make it more difficult for a person who would be an “interested stockholder” to effect various business combinations with us for a three-year period. This provision may encourage companies interested in acquiring us to negotiate in advance with our Board because the stockholder approval requirement would be avoided if our Board approves either the business combination or the transaction which results in the stockholder becoming an interested stockholder. These provisions also may have the effect of preventing changes in our Board, and may make it more difficult to accomplish transactions which stockholders may otherwise deem to be in their best interests.

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

Our Certificate of Incorporation eliminates directors’ liability for monetary damages to the fullest extent permitted by applicable law and eliminates officers’ personal liability to the Company or its stockholders for monetary damages for breach of fiduciary duty as an officer. Our Certificate of Incorporation and our Bylaws require us to indemnify and advance expenses to, to the fullest extent permitted by applicable law, its directors, officers and agents (and any other persons to which applicable law permits the Company to provide indemnification). Our Certificate of Incorporation and our Bylaws authorize our Board to determine whether to indemnify and advance expenses to, as set forth in the DGCL or any other applicable law, our employees and other agents. Further, our Certificate of Incorporation prohibits any retroactive changes to the rights or protections or increase the liability of any director or officer in effect at the time of the alleged occurrence of any act or omission to act giving rise to liability or indemnification. Additionally, our Certificate of Incorporation provides that if any applicable law is amended to authorize further corporate action eliminating or limiting the personal liability of officers, then the liability of an officer shall be eliminated or limited to the full extent permitted by such amended law. We believe that these provisions in our Certificate of Incorporation and our Bylaws are necessary to attract and retain qualified persons as directors and officers. However, these provisions may discourage stockholders from bringing a lawsuit against our directors and officers for breach of their fiduciary duty. These provisions also may have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. Furthermore, a stockholder’s investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

### **Transfer Agent**

The transfer agent for our Common Stock is Continental Stock Transfer & Trust Company.

### **Nasdaq Exchange Listing**

Our Common Stock is listed on Nasdaq under the symbol “JSPP.”

## SELLING STOCKHOLDERS

This prospectus covers the resale by the selling stockholders of up to 284,013,011 Resale Shares issuable upon conversion of the 4,655,951 shares of PIPE Preferred Stock, each share of which is convertible into a number of shares of Common Stock equal to the Conversion Ratio, subject to receipt of the Preferred Conversion Stockholder Approval and certain other conditions. For more information about the Financing and related transactions, see the section of this prospectus titled “Prospectus Summary–Recent Developments–Acquisition of Kira Pharmaceuticals and Private Placement.”

We are registering the Resale Shares in order to permit the selling stockholders to resell or otherwise dispose of such shares in the manner contemplated under the “Plan of Distribution” herein. We do not know how long the selling stockholders will hold the Resale Shares before selling them, and we currently have no agreements, arrangements or understandings with the selling stockholders regarding the sale of any of the Resale Shares. When we refer to the “selling stockholders” in this prospectus, we mean the persons and entities listed in the table below, and their respective pledgees, donees, permitted transferees, assignees, successors and others who later come to hold any of the selling stockholders’ interests in the Resale Shares.

Except as otherwise disclosed herein, the selling stockholders do not have, and within the past three years have not had, any material position, office or other material relationship with us.

The following table sets forth certain information, as of September 28, 2026, regarding the beneficial ownership of shares of Common Stock by the selling stockholders and the number of shares of our Common Stock being offered pursuant to this prospectus.

The table has been prepared based upon information furnished to us by the selling stockholders and, to our knowledge, is accurate as of the date of this prospectus. The selling stockholders may sell all, some or none of their Resale Shares in this offering, and may have sold, transferred or otherwise disposed of some or all of their Resale Shares since the date of this prospectus in transactions exempt from or not subject to the registration requirements of the Securities Act. Information concerning the selling stockholders may change from time to time and, if necessary, we will amend or supplement this prospectus as required.

| Name of selling stockholder                                                                                | Shares beneficially owned prior to this offering <sup>(1)</sup> | Maximum number of Resale Shares being offered <sup>(1)</sup> | Shares beneficially owned after the offering <sup>(1)(2)</sup> |                                    |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------------|------------------------------------|
|                                                                                                            |                                                                 |                                                              | Number of Shares                                               | Percentage of class <sup>(3)</sup> |
| Affinity Healthcare Fund, LP <sup>(4)</sup>                                                                | 30,768,156                                                      | 30,768,156                                                   | —                                                              | *%                                 |
| Affinity Healthcare Strategic Opportunity Fund, LP <sup>(5)</sup>                                          | 1,506,090                                                       | 1,506,090                                                    | —                                                              | *%                                 |
| AMAP Fund <sup>(6)</sup>                                                                                   | 316,895                                                         | 316,895                                                      | —                                                              | *%                                 |
| Armistice Capital Master Fund Ltd. <sup>(7)</sup>                                                          | 4,703,184                                                       | 4,303,184                                                    | 400,000                                                        | *%                                 |
| Atlas Private Holdings (Cayman) Ltd. <sup>(8)</sup>                                                        | 16,137,123                                                      | 16,137,123                                                   | —                                                              | *%                                 |
| BEMAP Master Fund Ltd <sup>(9)</sup>                                                                       | 1,199,626                                                       | 1,199,626                                                    | —                                                              | *%                                 |
| Blackstone CSP-MST FMAP Fund <sup>(10)</sup>                                                               | 1,222,867                                                       | 1,222,867                                                    | —                                                              | *%                                 |
| Boothbay Absolute Return Strategies, LP <sup>(11)</sup>                                                    | 7,755,784                                                       | 7,755,784                                                    | —                                                              | *%                                 |
| Boothbay Diversified Alpha Master Fund, LP <sup>(12)</sup>                                                 | 2,561,268                                                       | 2,561,268                                                    | —                                                              | *%                                 |
| Brahma Kira Partners LLC <sup>(13)</sup>                                                                   | 12,909,674                                                      | 12,909,674                                                   | —                                                              | *%                                 |
| Entities affiliated with Burkehill Global Management, LP <sup>(14)</sup>                                   | 1,075,735                                                       | 1,075,735                                                    | —                                                              | *%                                 |
| CM Sub-Advised Fund 2 Ltd. <sup>(15)</sup>                                                                 | 1,192,794                                                       | 1,192,794                                                    | —                                                              | *%                                 |
| David Chang IRRV Trust DTD 12/30/20 <sup>(16)</sup>                                                        | 1,613,694                                                       | 1,613,694                                                    | —                                                              | *%                                 |
| Diadema Partners Master Fund LP <sup>(17)</sup>                                                            | 451,827                                                         | 451,827                                                      | —                                                              | *%                                 |
| Diadema Strategic Fund LP <sup>(18)</sup>                                                                  | 882,121                                                         | 882,121                                                      | —                                                              | *%                                 |
| Ghisallo Master Fund LP <sup>(19)</sup>                                                                    | 4,303,184                                                       | 4,303,184                                                    | —                                                              | *%                                 |
| Ikarian Healthcare Master Fund, LP <sup>(20)</sup>                                                         | 21,957,133                                                      | 21,957,133                                                   | —                                                              | *%                                 |
| Integrated Core Strategies (US) LLC <sup>(21)</sup>                                                        | 6,543,856                                                       | 6,454,837                                                    | 89,019                                                         | *%                                 |
| Manatee Access Fund LP <sup>(22)</sup>                                                                     | 341,173                                                         | 341,173                                                      | —                                                              | *%                                 |
| Matthew Ros <sup>(23)</sup>                                                                                | 118,231                                                         | 53,741                                                       | 64,490                                                         | *%                                 |
| Mirador Therapeutics, Inc. <sup>(24)</sup>                                                                 | 53,790,471                                                      | 53,790,471                                                   | —                                                              | *%                                 |
| Nazare Partners <sup>(25)</sup>                                                                            | 6,454,837                                                       | 6,454,837                                                    | —                                                              | *%                                 |
| Opaleye L.P. <sup>(26)</sup>                                                                               | 6,454,837                                                       | 6,454,837                                                    | —                                                              | *%                                 |
| Patrick J. Crutcher <sup>(27)</sup>                                                                        | 572,072                                                         | 53,741                                                       | 518,331                                                        | *%                                 |
| Persistent Asset Global Select Fund SPC <sup>(28)</sup>                                                    | 617,503                                                         | 617,503                                                      | —                                                              | *%                                 |
| Riverview Omni Master Fund LP <sup>(29)</sup>                                                              | 1,590,392                                                       | 1,590,392                                                    | —                                                              | *%                                 |
| Rubric Capital Master Fund LP <sup>(30)</sup>                                                              | 29,534,858                                                      | 29,534,858                                                   | —                                                              | *%                                 |
| Seligman Healthcare Spectrum (Master) Fund by Columbia Management Investment Advisers, LLC <sup>(31)</sup> | 28,401,356                                                      | 28,401,356                                                   | —                                                              | *%                                 |
| Seven Grand Master Fund LP <sup>(32)</sup>                                                                 | 23,302                                                          | 23,302                                                       | —                                                              | *%                                 |
| SILV Fund, Ltd. <sup>(33)</sup>                                                                            | 16,871,746                                                      | 16,871,746                                                   | —                                                              | *%                                 |
| SilverArc Capital Alpha Fund I <sup>(34)</sup>                                                             | 306,586                                                         | 306,586                                                      | —                                                              | *%                                 |
| SilverArc Capital Alpha Fund II <sup>(35)</sup>                                                            | 7,666,175                                                       | 7,666,175                                                    | —                                                              | *%                                 |
| Squadron Master Fund LP <sup>(36)</sup>                                                                    | 6,454,837                                                       | 6,454,837                                                    | —                                                              | *%                                 |
| Squarepoint Diversified Partners Fund Limited <sup>(37)</sup>                                              | 2,785,260                                                       | 2,785,260                                                    | —                                                              | *%                                 |
| Stonepine Capital, LP <sup>(38)</sup>                                                                      | 4,303,184                                                       | 4,303,184                                                    | —                                                              | *%                                 |
| SummitTX Master, SPC - SummitTX Apex SP <sup>(39)</sup>                                                    | 430,782                                                         | 430,782                                                      | —                                                              | *%                                 |
| SummitTX Master, SPC- SummitTX Alpha SP <sup>(40)</sup>                                                    | 400,404                                                         | 400,404                                                      | —                                                              | *%                                 |
| SummitTX Pinnacle Master, L.P. <sup>(41)</sup>                                                             | 665,327                                                         | 665,327                                                      | —                                                              | *%                                 |
| Valence8 Diversified (US) LLC <sup>(42)</sup>                                                              | 200,080                                                         | 200,080                                                      | —                                                              | *%                                 |

\* Represents beneficial ownership of less than one percent of the outstanding shares of our Common Stock.

- (1) Beneficial ownership is determined in accordance with SEC rules and generally includes voting or investment power with respect to shares of Common Stock. Shares of Common Stock subject to options and warrants currently exercisable, or exercisable within 60 days, and shares of Common Stock issuable upon conversion of Preferred Stock that is convertible within 60 days, are counted as outstanding for computing the percentage of the person holding such securities but are not counted as outstanding for computing the percentage of any other person. Under the Certificate of Designation, a holder of Preferred Stock may not convert shares of Preferred Stock into Common Stock (i) prior to receipt of the Preferred Conversion Stockholder Approval or (ii) to the extent such conversion would cause such holder, together with its affiliates and attribution parties, to beneficially own Common Stock in excess of the Beneficial Ownership Limitation applicable to such holder. For a description of the Beneficial Ownership Limitation, see “Description of Capital Stock—Preferred Stock—Non-Voting Convertible Preferred Stock.” The number of shares and percentages set forth in the table do not give effect to these limitations.

- (2) The amount and percentage of shares of our Common Stock that will be beneficially owned by the selling stockholders after completion of the offering assumes that they will sell all shares of our Common Stock being offered pursuant to this prospectus.
- (3) Based on 33,274,561 shares of our Common Stock issued and outstanding as of September 28, 2026. All shares of our Common Stock being offered pursuant to this prospectus by a selling stockholder are counted as outstanding for computing the percentage of beneficial ownership of such selling stockholder, without regard to the Beneficial Ownership Limitation or the requirement that the Preferred Conversion Stockholder Approval be obtained, in each case as described in footnote (1) above.
- (4) Includes 30,768,156 Resale Shares issuable upon conversion of 504,396 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Andrew Weinstein, 450 Park Avenue, Suite 1403, New York, NY 10022.
- (5) Includes 1,506,090 Resale Shares issuable upon conversion of 24,690 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Andrew Weinstein, 450 Park Avenue, Suite 1403, New York, NY 10022.
- (6) Includes 316,895 Resale Shares issuable upon conversion of 5,195 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Rubric Capital Management LP, 155 East 44th Street, Suite 1630, New York, NY 10017.
- (7) Includes (i) 4,303,184 Resale Shares issuable upon conversion of 70,544 shares of PIPE Preferred Stock and (ii) 400,000 shares of Common Stock issuable upon exercise of warrants exercisable within 60 days of September 28, 2026. The securities are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the “Armistice Master Fund”), and may be deemed to be beneficially owned by: (i) Armistice Capital, LLC (“Armistice Capital”), as the investment manager of the Armistice Master Fund; and (ii) Steven Boyd, as the Managing Member of Armistice Capital. The warrants are subject to a beneficial ownership limitation of 4.99%, which such limitation restricts the Selling Stockholder from exercising that portion of the warrants that would result in the Selling Stockholder and its affiliates owning, after exercise, a number of shares of common stock in excess of the beneficial ownership limitation. The address of Armistice Master Fund is c/o Armistice Capital, LLC, 510 Madison Avenue, 7th Floor, New York, NY 10022.
- (8) Includes 16,137,123 Resale Shares issuable upon conversion of 264,543 shares of PIPE Preferred Stock. Balyasny Asset Management L.P. is the investment adviser of Atlas Private Holdings (Cayman) Ltd. Dmitry Balyasny, via intermediate entities, manages Balyasny Asset Management L.P. and has voting and investment control over the reported securities. The address for the selling stockholder is c/o Balyasny Asset Management L.P., 444 West Lake Street, 50th Floor, Chicago, IL 60606.
- (9) Includes 1,199,626 Resale Shares issuable upon conversion of 19,666 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Rubric Capital Management LP, 155 East 44th Street, Suite 1630, New York, NY 10017.
- (10) Includes 1,222,867 Resale Shares issuable upon conversion of 20,047 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Rubric Capital Management LP, 155 East 44th Street, Suite 1630, New York, NY 10017.
- (11) Includes 7,755,784 Resale Shares issuable upon conversion of 127,144 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Boothbay Fund Management LLC, 140 E. 45th Street, 16 FL, New York, NY 10017.

- (12) Includes 2,561,268 Resale Shares issuable upon conversion of 41,988 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Boothbay Fund Management LLC, 140 E. 45th Street, 16 FL, New York, NY 10017.
- (13) Includes 12,909,674 Resale Shares issuable upon conversion of 211,634 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Sundee Agrawal, 713 Creek Bluff Drive, Keller, TX 76248.
- (14) Includes 1,075,735 Resale Shares issuable upon conversion of 17,635 shares of PIPE Preferred Stock beneficially owned by Burkehill Fund Ltd (“Arleigh Fund”) and Burkehill Master Fund LP (“Admiral Fund” and, together with the Arleigh Fund, the “Burkehill Funds”). Burkehill Global Management, LP (“Burkehill”) serves as investment manager to the Burkehill Funds. As such, Burkehill has been granted investment discretion over the Resale Shares owned by the Burkehill Funds. Christopher Rich serves as Managing Partner of Burkehill, the Managing Member of Burkehill Global LLC (“Burkehill GP”), the general partner of Burkehill, and the Managing Member of Burkehill Fund GP LLC (“Burkehill Fund GP”), the general partner of the Admiral Fund. Each of Burkehill, Burkehill GP, Burkehill Fund GP and Mr. Rich disclaim beneficial ownership of the securities held by the Burkehill Funds except to the extent of their or its pecuniary interest therein. The business address for the Burkehill Funds is c/o Burkehill Global Management, LP, 280 Park Avenue, 20th Floor, New York, NY 10017.
- (15) Includes 1,192,794 Resale Shares issuable upon conversion of 19,554 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Seven Grand Managers, LLC, 81 Pondfield Road, Suite C302, Bronxville, NY 10708.
- (16) Includes 1,613,694 Resale Shares issuable upon conversion of 26,454 shares of PIPE Preferred Stock. The address for the selling stockholder is 813 Riverside Drive, Newport News, VA 23606.
- (17) Includes 451,827 Resale Shares issuable upon conversion of 7,407 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Diadema Partners LP, 2140 Headquarters Plaza, 2nd Floor, East Tower, Morristown, NJ 07960.
- (18) Includes 882,121 Resale Shares issuable upon conversion of 14,461 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Diadema Partners LP, 2140 Headquarters Plaza, 2nd Floor, East Tower, Morristown, NJ 07960.
- (19) Includes 4,303,184 Resale Shares issuable upon conversion of 70,544 shares of PIPE Preferred Stock. Ghisallo Capital Management LLC (“Ghisallo Capital”) is the investment manager of the selling stockholder. Ghisallo Capital and Michael Germino, who indirectly controls Ghisallo Capital, have shared voting and investment power over the shares. The shares held by the selling stockholder may be deemed to be beneficially owned by Ghisallo Capital and Mr. Germino. Notwithstanding the foregoing, Mr. Germino disclaims beneficial ownership of the shares except to the extent of his pecuniary interest therein. The address for the selling stockholder is 190 Elgin Avenue, George Town Grand Cayman, CI KY1-9008.
- (20) Includes 21,957,133 Resale Shares issuable upon conversion of 359,953 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Ikarian Capital LLC, 100 Crescent Ct., Suite 1620, Dallas, TX 75201.
- (21) Includes (i) 6,454,837 Resale Shares issuable upon conversion of 105,817 shares of PIPE Preferred Stock and (ii) 89,019 shares of Common Stock. The securities listed above may be deemed to be beneficially owned by Millennium Management LLC, Millennium Group Management LLC and Israel A. Englander (“Mr. Englander”) and/or other investment managers that may be controlled by Millennium Group Management LLC (the managing member of Millennium Management LLC) and Mr. Englander (the sole voting trustee of the managing member of Millennium Group Management LLC). The foregoing should not be construed in and of itself as an admission by Millennium Management LLC, Millennium Group Management LLC or Mr. Englander as to the beneficial ownership of the securities held by such entities. The address for Integrated Core Strategies (US) LLC is c/o Millennium Management LLC, 399 Park Avenue, New York, New York 10022. The address for the selling stockholder is c/o Millennium International Management LP, 399 Park Avenue, New York, NY 10022.
- (22) Includes 341,173 Resale Shares issuable upon conversion of 5,593 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Sirenia Capital Management LP, 1674 Meridian Avenue, Suite 320, Miami Beach, FL 33139.
- (23) Includes (i) 53,741 Resale Shares issuable upon conversion of 881 shares of PIPE Preferred Stock, (ii) 53,741 shares of Common Stock, and (iii) 10,749 shares of Common Stock issuable upon exercise of options exercisable within 60 days of September 28, 2026. The address for the selling stockholder is 3 Pond View Place, Andover, MA 01810.
- (24) Includes 53,790,471 Resale Shares issuable upon conversion of 881,811 shares of PIPE Preferred Stock. The address for the selling stockholder is 4902 Headquarters Point, Suite 300, San Diego, CA 92121.

- (25) Includes 6,454,837 Resale Shares issuable upon conversion of 105,817 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Nicklay Voronin, Citrus Grove Building, 106 Goring Avenue, Grand Cayman, Cayman Islands, KY1-1001.
- (26) Includes 6,454,837 Resale Shares issuable upon conversion of 105,817 shares of PIPE Preferred Stock. The address for the selling stockholder is One Boston Place, 26th Floor, Boston, MA 02108.
- (27) Includes (i) 518,331 shares held directly and (ii) 53,741 Resale Shares issuable upon conversion of 881 shares of Preferred Stock. Excludes 28,216,404 shares of Common Stock issuable upon conversion of 462,564 shares of Preferred Stock, which are not being registered for resale under this prospectus. The address for the selling stockholder is 951 Glenwood Avenue SE #1806, Atlanta, GA 30316.
- (28) Includes 617,503 Resale Shares issuable upon conversion of 10,123 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Diadema Partners LP, 2140 Headquarters Plaza, 2nd Floor, East Tower, Morristown, NJ 07960.
- (29) Includes 1,590,392 Resale Shares issuable upon conversion of 26,072 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Seven Grand Managers, LLC, 81 Pondfield Road, Suite C302, Bronxville, NY 10708.
- (30) Includes 29,534,858 Resale Shares issuable upon conversion of 484,178 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Rubric Capital Management LP, 155 East 44th Street, Suite 1630, New York, NY 10017.
- (31) Includes 28,401,356 Resale Shares issuable upon conversion of 465,596 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Columbia Management Investment Advisers, LLC, 290 Congress Street, Boston, MA 02210.
- (32) Includes 23,302 Resale Shares issuable upon conversion of 382 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Seven Grand Managers, LLC, 81 Pondfield Road, Suite C302, Bronxville, NY 10708.
- (33) Includes 16,871,746 Resale Shares issuable upon conversion of 276,586 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Sirenia Capital Management LP, 1674 Meridian Avenue, Suite 320, Miami Beach, FL 33139.
- (34) Includes 306,586 Resale Shares issuable upon conversion of 5,026 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o SilverArc Capital, 20 Park Plaza, Suite 620, Boston, MA 02116.
- (35) Includes 7,666,175 Resale Shares issuable upon conversion of 125,675 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o SilverArc Capital, 20 Park Plaza, Suite 620, Boston, MA 02116.

- (36) Includes 6,454,837 Resale Shares issuable upon conversion of 105,817 shares of PIPE Preferred Stock. The address for the selling stockholder is 1211 W. 22nd Street, Suite 1008, Oak Brook, IL 60523.
- (37) Includes 2,785,260 Resale Shares issuable upon conversion of 45,660 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o SilverArc Capital, 20 Park Plaza, Suite 620, Boston, MA 02116.
- (38) Includes 4,303,184 Resale Shares issuable upon conversion of 70,544 shares of PIPE Preferred Stock. The address for the selling stockholder is 2900 NW Clearwater Drive, Suite 100-11, Bend, OR 97703.
- (39) Includes 430,782 Resale Shares issuable upon conversion of 7,062 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o SummitTX Capital, LP, 201 Main Street, Suite 1900, Fort Worth, TX 76102.
- (40) Includes 400,404 Resale Shares issuable upon conversion of 6,564 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o SummitTX Capital, LP, 201 Main Street, Suite 1900, Fort Worth, TX 76102.
- (41) Includes 665,327 Resale Shares issuable upon conversion of 10,907 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o SummitTX Capital, LP, 201 Main Street, Suite 1900, Fort Worth, TX 76102.
- (42) Includes 200,080 Resale Shares issuable upon conversion of 3,280 shares of PIPE Preferred Stock. The address for the selling stockholder is c/o Diadema Partners LP, 2140 Headquarters Plaza, 2nd Floor, East Tower, Morristown, NJ 07960.

#### **Material Relationships with Selling Stockholders**

Prior to the Merger, Kira, which became our wholly owned subsidiary upon the closing of the Merger, granted Mirador an exclusive, worldwide, royalty-bearing license to develop, manufacture and commercialize products containing Kira's KP-301 and KP-402 compounds, in consideration for upfront, milestone and royalty payments, pursuant to the Mirador License Agreement. The Mirador License Agreement was entered into in contemplation of the Merger and the Financing, and Mirador participated as an investor in the Financing. For additional information about the Mirador License Agreement, see the section titled "Prospectus Summary—Overview—License and Collaboration Agreements" in this prospectus.

Matthew Ros has served as our Chief Operating Officer, and as our interim Corporate Secretary, since July 2026.

Patrick Crutcher has served as a member of the Board since July 2026, having been appointed as a Class I director in connection with the Merger.

## PLAN OF DISTRIBUTION

We are registering the Resale Shares issuable to the selling stockholders upon conversion of the Preferred Stock to permit the resale of these Resale Shares by the holders thereof from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the Resale Shares. We will, or will procure to, bear all costs, fees and expenses incident to our obligation to register the Resale Shares.

The selling stockholders may sell all or a portion of the Resale Shares beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the Resale Shares are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The Resale Shares may be sold 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 or in transactions otherwise than on these exchanges or systems or in the over-the-counter market and in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions. The selling stockholders may use any one or more of the following methods when selling the Resale Shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the Resale Shares 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;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether such options are listed on an options exchange or otherwise;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders also may resell all or a portion of the Resale Shares in open market transactions in reliance upon Rule 144 under the Securities Act, as permitted by that rule, or Section 4(a)(1) under the Securities Act, if available, rather than under this prospectus, provided that they meet the criteria and conform to the requirements of those provisions.

Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. If the selling stockholders effect such transactions by selling Resale Shares to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the Resale Shares for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction will not be 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 IM 2121.01.

In connection with sales of the Resale Shares or otherwise, 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 Resale Shares in the course of hedging in positions they assume. The selling stockholders may also sell Resale Shares short and if such short sale shall take place after the date that the registration statement of which this prospectus forms a part is declared effective by the SEC, the selling stockholders may deliver Resale Shares covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge Resale Shares to broker-dealers that in turn may sell such shares, to the extent permitted by applicable law. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of Resale Shares offered by this prospectus, which Resale Shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction). Notwithstanding the foregoing, the selling stockholders have been advised that they may not use Resale Shares to cover short sales of our Common Stock made prior to the date the registration statement of which this prospectus forms a part has been declared effective by the SEC.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the Resale Shares owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the Resale Shares from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act, amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the Resale Shares in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholders and any broker-dealer or agents participating in the distribution of the Resale Shares may be deemed to be “underwriters” within the meaning of Section 2(11) of the Securities Act in connection with such sales. In such event, any commissions paid, or any discounts or concessions allowed to, any such broker-dealer or agent and any profit on the resale of the Resale Shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Selling stockholders who are “underwriters” within the meaning of Section 2(11) of the Securities Act will be subject to the applicable prospectus delivery requirements of the Securities Act including Rule 172 thereunder and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act.

Each selling stockholder has informed us that it is not a registered broker-dealer and does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the Resale Shares. Upon our being notified in writing by a selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale 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 will be filed, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such selling stockholder and of the participating broker-dealer(s), (ii) the number of shares involved, (iii) the price at which the Resale Shares 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, and (vi) other facts material to the transaction.

Under the securities laws of some U.S. states, the Resale Shares may be sold in such states only through registered or licensed brokers or dealers. In addition, in some U.S. states the Resale Shares may not be sold unless they have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the Resale Shares registered pursuant to the shelf registration statement, of which this prospectus forms a part.

Each selling stockholder and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the Resale Shares by the selling stockholder and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the Resale Shares to engage in market-making activities with respect to the Common Stock. All of the foregoing may affect the marketability of the Resale Shares and the ability of any person or entity to engage in market-making activities with respect to the Common Stock.

We will pay all expenses of the registration of the Resale Shares pursuant to the Registration Rights Agreement, including, without limitation, SEC filing fees and expenses of compliance with state securities or “blue sky” laws; *provided, however*, that each selling stockholder will pay all underwriting discounts and selling commissions, if any, and any related legal expenses incurred by it. We will indemnify the selling stockholders against certain liabilities, including some liabilities under the Securities Act, in accordance with the Registration Rights Agreement, or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the selling stockholders specifically for use in this prospectus, in accordance with the Registration Rights Agreement, or we may be entitled to contribution.

## 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 financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2025 have been so incorporated in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 2 to the financial statements) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

The consolidated balance sheets of Kira Pharmaceuticals as of December 31, 2025 and 2024, and the related consolidated statements of operations and comprehensive loss, redeemable convertible preferred stock and stockholders' deficit, and cash flows for each of the years then ended, have been audited by EisnerAmper LLP, independent accountant, as stated in their report which is incorporated herein by reference, and which report includes an explanatory paragraph about the existence of substantial doubt concerning Kira Pharmaceuticals' 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 ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities being offered under this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth or incorporated by reference in the registration statement of which this prospectus is a part and the exhibits to such registration statement. For further information with respect to us and the securities offered by this prospectus, we refer you to the registration statement of which this prospectus is a part and the exhibits to such registration statement. Statements contained in this prospectus as to the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement or an exhibit to the reports or other documents incorporated by reference into this prospectus, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit.

The SEC maintains an Internet website that contains reports, proxy statements and other information about issuers, like us, that file electronically with the SEC. The address of that website is [www.sec.gov](http://www.sec.gov). You may also request a copy of these filings, at no cost, by writing us at 2200 Bridge Pkwy Suite #102, Redwood City, CA 94065 or telephoning us at (650) 549-1400.

We are subject to the information and reporting requirements of the Exchange Act and, in accordance with this law, file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information are available at the website of the SEC referred to above. We also maintain a website at [www.jaspertherapeutics.com](http://www.jaspertherapeutics.com). You may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on or connected to our website is not a part of, and is not incorporated into, this prospectus or any prospectus supplement and the inclusion of our website address in this prospectus is an inactive textual reference only.

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” the information and reports we file with it into this prospectus and any applicable prospectus supplement, which means that we can disclose important information to you by referring you to these documents. The information incorporated by reference is an important part of this prospectus and any applicable prospectus supplement, and information we file later with the SEC will automatically update and supersede this information. Any statement contained in this prospectus or a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or a subsequently filed document incorporated by reference modifies or replaces that statement. We are incorporating by reference the documents listed below as of their respective dates of filing, which we have already filed with the SEC. Any report or information within any of the documents referred below that is furnished, but not filed, shall not be incorporated by reference into this prospectus.

- The Registrant’s Annual Report on [Form 10-K](#) for the year ended December 31, 2025 (filed with the SEC on March 30, 2026), as amended on [Form 10-K/A](#) (filed with the SEC on April 30, 2026);
- The Registrant’s Quarterly Reports on Form 10-Q for the quarters ended [March 31, 2026](#) and [June 30, 2026](#) (filed with the SEC on May 14, 2026 and August 14, 2026, respectively);
- The Registrant’s Current Reports on Form 8-K filed with the SEC on [January 7, 2026](#), [January 8, 2026](#), [May 21, 2026](#), [June 9, 2026](#), [July 17, 2026](#) (as amended by the Current Reports on Form 8-K/A, filed with the SEC on [October 1, 2026](#) and [October 5, 2026](#)), [July 31, 2026](#), [August 3, 2026](#), [August 26, 2026](#), [September 28, 2026](#), [October 5, 2026](#) and [October 7, 2026](#); and
- The description of the Registrant’s Common Stock set forth in the Registration Statement on [Form 8-A](#) filed with the SEC on November 18, 2019 (File No. 001-39138) pursuant to Section 12(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), including any amendments or reports filed for the purpose of updating such description, including the description of the Registrant’s Common Stock included as [Exhibit 4.5](#) to the Registrant’s Annual Report on Form 10-K for the year ended December 31, 2025, filed with the SEC on March 30, 2026.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed 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 effectiveness of such 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 future filings will become a part of this prospectus from the respective dates that such documents are filed with the SEC. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes hereof to the extent that a statement contained herein or in any other subsequently filed document which is also incorporated or deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may obtain any of the documents incorporated by reference in this prospectus from the SEC through the SEC’s website at the address provided above. Documents incorporated by reference are also available from us, without charge. You may obtain documents incorporated by reference in this prospectus by requesting them in writing or by telephone at the following address or phone number:

Jasper Therapeutics, Inc.  
2200 Bridge Pkwy Suite #102  
Redwood City, CA 94065  
Attn: President and Chief Executive Officer  
(650) 549-1400

You also may access these filings on our Internet site at <https://www.jaspertherapeutics.com/>. Information contained on or connected to our website is not a part of, and is not incorporated into, this prospectus or the registration statement of which this prospectus is a part or any prospectus supplement, and the inclusion of our website address in this prospectus is an inactive textual reference only. This prospectus is part of a registration statement we filed with the SEC. We have incorporated exhibits into the registration statement of which this prospectus is a part. You should read the exhibits carefully for provisions that may be important to you.

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

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

The following table sets forth an estimate of the fees and expenses, payable by the Registrant in connection with the sale of Common Stock being registered. All the amounts shown, except for the SEC registration fee, are estimates.

|                                              |                     |
|----------------------------------------------|---------------------|
| SEC registration fee                         | \$ 13,837.11        |
| Accounting fees and expenses                 | *                   |
| Legal fees and expenses                      | *                   |
| Printing and miscellaneous fees and expenses | *                   |
| Total                                        | <u>\$ 13,837.11</u> |

\* Estimated expenses not presently known.

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

Section 102 of the General Corporation Law of the State of Delaware (“DGCL”) permits a corporation to eliminate or limit the personal liability of a director or officer of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director or officer, provided that such provision shall not eliminate or limit the liability of:

- (i) a director or officer for any breach of his or her duty of loyalty to the corporation or its stockholders;
- (ii) a director or officer for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- (iii) a director who authorized the payment of a dividend or approved a stock repurchase or redemption in violation of the DGCL;
- (iv) a director or officer for any transaction from which the director or officer derived an improper personal benefit; or
- (v) an officer in any action by or in the right of the corporation.

The Registrant’s second amended and restated certificate of incorporation (as amended, the “Certificate of Incorporation”), provides that no director or officer of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director or officer, notwithstanding any provision of law imposing such liability, except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding by reason of such position, if such person 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, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to judgments, fines and amounts paid in settlement in connection with such action, suit or proceeding or with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper. The Certificate of Incorporation permits the Registrant to indemnify its directors, officers, employees and other agents to the maximum extent permitted by the DGCL, and the Registrant’s third amended and restated bylaws (the “Bylaws”) provide that the Registrant will indemnify its directors and officers and permit the Registrant to indemnify its employees and other agents, in each case to the extent not prohibited by the DGCL or any other applicable law.

The Registrant has entered, and expects to continue to enter, into indemnification agreements with its directors and officers, that may be broader than the specific indemnification provisions contained in the DGCL. These agreements, among other things, require the Registrant to indemnify each director and officer to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys’ fees, judgments, penalties, fines and settlement amounts actually and reasonably incurred by the director or executive officer in any action or proceeding, including any action or proceeding by or in right of the Registrant, arising out of the person’s services as a director or executive officer. These indemnification agreements also require the Registrant to advance all expenses incurred by the directors and executive officers in investigating or defending any such action, suit or proceeding, subject to certain exceptions.

The Bylaws provide that the Registrant may purchase insurance on behalf of any person required or permitted to be indemnified to the extent permitted by the DGCL or any other applicable law. The Registrant has obtained insurance under which, subject to the limitations of the insurance policies, coverage is provided to the Registrant's directors and executive officers against loss arising from claims made by reason of breach of fiduciary duty or other wrongful acts as a director or executive officer, including claims related to various liabilities arising under the Securities Act of 1933, as amended (the "Securities Act"), and the Securities Exchange Act of 1934, as amended, and to the Registrant with respect to payments that may be made by the Registrant to these directors and executive officers pursuant to the Registrant's indemnification obligations or otherwise as a matter of law.

At present, there is no pending litigation or proceeding involving a director or officer of the Registrant regarding which indemnification is sought, nor is the Registrant aware of any threatened litigation that may result in claims for indemnification.

See also the undertakings set out in response to Item 17 herein.

#### Item 16. Exhibits

| Exhibit No. | Exhibit Description                                                                                                                                                                                                          | Incorporated by Reference |                                |         | Filed Herewith |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------|---------|----------------|
|             |                                                                                                                                                                                                                              | Form                      | Filing Date/Period<br>End Date | Exhibit |                |
| 2.1†        | <a href="#">Agreement and Plan of Merger, dated July 16, 2026, by and among Jasper Therapeutics, Inc., Kira Holdco Inc. and Kira Pharmaceuticals.</a>                                                                        | 8-K                       | 7/17/2026                      | 2.1     |                |
| 3.1         | <a href="#">Second Amended and Restated Certificate of Incorporation of Jasper Therapeutics, Inc.</a>                                                                                                                        | 8-K                       | 09/29/2021                     | 3.1     |                |
| 3.2         | <a href="#">Certificate of Amendment to the Second Amended and Restated Certificate of Incorporation, dated June 8, 2023.</a>                                                                                                | 8-K                       | 6/8/2023                       | 3.1     |                |
| 3.3         | <a href="#">Certificate of Second Amendment to the Second Amended and Restated Certificate of Incorporation of Jasper Therapeutics, Inc., filed with the Secretary of State of the State of Delaware on January 3, 2024.</a> | 8-K                       | 1/4/2024                       | 3.1     |                |
| 3.5         | <a href="#">Third Amended and Restated Bylaws of Jasper Therapeutics, Inc.</a>                                                                                                                                               | 8-K                       | 02/17/2023                     | 3.1     |                |
| 3.6         | <a href="#">Jasper Therapeutics, Inc. Certificate of Designation of Preferences, Rights and Limitations of Non-Voting Convertible Preferred Stock.</a>                                                                       | 8-K                       | 7/17/2026                      | 3.1     |                |
| 5.1         | <a href="#">Opinion of DLA Piper LLP (US).</a>                                                                                                                                                                               |                           |                                |         | X              |
| 10.1        | <a href="#">Form of Securities Purchase Agreement, dated as of July 16, 2026, by and among Jasper Therapeutics, Inc. and each investor listed on Exhibit A thereto.</a>                                                      | 8-K                       | 7/17/2026                      | 10.1    |                |
| 10.2        | <a href="#">Form of Registration Rights Agreement, by and among Jasper Therapeutics, Inc. and the investors signatory thereto.</a>                                                                                           | 8-K                       | 7/17/2026                      | 10.2    |                |
| 23.1        | <a href="#">Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm for Jasper Therapeutics, Inc.</a>                                                                                           |                           |                                |         | X              |
| 23.2        | <a href="#">Consent of EisnerAmper LLP, independent registered public accounting firm for Kira Pharmaceuticals.</a>                                                                                                          |                           |                                |         | X              |
| 23.3        | <a href="#">Consent of DLA Piper LLP (US) (included in Exhibit 5.1).</a>                                                                                                                                                     |                           |                                |         |                |
| 24.1        | <a href="#">Power of Attorney (contained on the signature page)</a>                                                                                                                                                          |                           |                                |         | X              |
| 107         | <a href="#">Filing Fee Table</a>                                                                                                                                                                                             |                           |                                |         | X              |

† Schedules have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company hereby undertakes to furnish supplemental copies of any of the omitted schedules upon request by the SEC; provided, that the Company may request confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended, for any schedules so furnished.

## Item 17. Undertakings

(a) The undersigned Registrant hereby undertakes:

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

- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Filing Fee Tables" in the effective registration statement; and
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

*provided, however*, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC 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 to any purchaser:

- (i) 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
- (ii) 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 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.

(b) That, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 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.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities 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 Securities Act and will be governed by the final adjudication of such issue.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, 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 Redwood City, State of California, on October 14, 2026.

### JASPER THERAPEUTICS, INC.

By: /s/ Jeet Mahal  
Jeet Mahal  
President, Chief Executive Officer and Interim Chief  
Financial Officer

## POWER OF ATTORNEY

**KNOW ALL PERSONS BY THESE PRESENTS**, that each person whose signature appears below constitutes and appoints Jeet Mahal and Rick Ruiz, and each of them acting individually, as his or her true and lawful attorneys-in-fact and agents, with full power of each to act alone, with full powers of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, and generally to do all such things in their names and behalf in their capacities as officers and directors to enable Jasper Therapeutics, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that all said attorneys-in-fact and agents, or any of them or their or his or her substitutes or resubstitutes, may lawfully do or cause to be done by virtue hereof.

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

| <b>SIGNATURE</b>                                                      | <b>TITLE</b>                                                                                                                       | <b>DATE</b>      |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <u>/s/ Jeet Mahal</u><br>Jeet Mahal                                   | President, Chief Executive Officer, Interim Chief Financial Officer and<br>Director<br>(Principal Executive and Financial Officer) | October 14, 2026 |
| <u>/s/ Rick Ruiz</u><br>Rick Ruiz                                     | Interim Principal Accounting Officer<br>(Principal Accounting Officer)                                                             | October 14, 2026 |
| <u>/s/ Thomas G. Wiggans</u><br>Thomas G. Wiggans                     | Chairperson of the Board                                                                                                           | October 14, 2026 |
| <u>/s/ Judith Shizuru, M.D., Ph.D.</u><br>Judith Shizuru, M.D., Ph.D. | Director                                                                                                                           | October 14, 2026 |
| <u>/s/ Kurt von Emster</u><br>Kurt von Emster                         | Director                                                                                                                           | October 14, 2026 |
| <u>/s/ Patrick Crutcher</u><br>Patrick Crutcher                       | Director                                                                                                                           | October 14, 2026 |
| <u>/s/ Svetlana Lucas, Ph.D.</u><br>Svetlana Lucas, Ph.D.             | Director                                                                                                                           | October 14, 2026 |

**DLA Piper LLP (US)**

One Liberty Place  
1650 Market Street, Suite 5000  
Philadelphia, PA 19103-7300  
www.dlapiper.com

T: 215-656-3300

F: 215-656-3301

October 14, 2026

Jasper Therapeutics, Inc.  
2200 Bridge Pkwy Suite #102  
Redwood City, CA 94065

Re: Jasper Therapeutics, Inc. – Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to Jasper Therapeutics, Inc., a Delaware corporation (the “Company”), in connection with the filing by the Company of a Registration Statement on Form S-3 (the “Registration Statement”) under the Securities Act of 1933, as amended (the “Act”), with the Securities and Exchange Commission (the “SEC”) pursuant to Rule 415 under the Act. The Registration Statement relates to the proposed offering and sale of an aggregate of up to 284,013,011 shares (the “Shares”) of common stock, par value \$0.0001 per share (“Common Stock”) issuable upon the conversion of the 4,655,951 shares of the Company’s non-voting convertible preferred stock, par value \$0.0001 per share (the “Preferred Stock”), issued to certain investors in a private placement transaction (the “PIPE Offering”) pursuant to that certain securities purchase agreement, dated July 16, 2026 (the “Purchase Agreement”). This opinion is being furnished in connection with the filing of the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or related prospectus, or any prospectus filed pursuant to Rule 424(b) with respect thereto, other than as expressly stated herein with respect to the issuance of the Shares upon the conversion of the Preferred Stock.

As counsel for the Company, we have examined and relied upon the Registration Statement and the prospectus contained therein, the Purchase Agreement, and originals or copies certified or otherwise identified to our satisfaction, of the Company’s Second Amended and Restated Certificate of Incorporation (as amended, the “Charter”), the Company’s Third Amended and Restated Bylaws, the Certificate of Designation of Preferences, Rights and Limitations of Non-Voting Convertible Preferred Stock (the “Certificate of Designation”), resolutions adopted at meetings, or actions by written consent, of the board of directors of the Company (or a committee thereof) approving the Purchase Agreement and the transactions contemplated thereby, the offering and issuance of the Preferred Stock in the PIPE Offering and the preparation and filing of the Registration Statement, among other things, and such other documents, corporate records, certificates of public officials, and other instruments as we have deemed necessary for the purposes of rendering this opinion.

In our examination, we have assumed the genuineness and validity of all signatures (including, without limitation, signatures via DocuSign, eSignature or similar technology); the authenticity and completeness of all documents submitted to us as originals, and the conformity with the originals of all documents submitted to us as copies (including photostatic copies and portable document file (.pdf) copies) and the authenticity and completeness of the originals of such copies, or which we obtained from the SEC’s Electronic Data Gathering, Analysis and Retrieval (“EDGAR”) system; that each individual executing any document, whether on behalf of such individual or an entity, is legally competent to do so; the due authority of the parties signing any document on behalf of a party (other than the Company); that all public records reviewed or relied upon by us are authentic, accurate and complete; that all factual statements and information contained in any documents are true and complete; and that there has been no oral or written modification or amendments to any documents by action or omission of the parties or otherwise. This opinion letter is given, and all statements herein are made, in the context of the foregoing.

---

For purposes of the opinion set forth below, we have assumed that, prior to the issuance of any Shares upon conversion of the Preferred Stock, (i) the Company will have taken all corporate action necessary to obtain the required approval of the stockholders of the Company and to make any required filing with the Secretary of State of the State of Delaware in order to amend the Charter to increase the number of authorized shares of Common Stock (and/or to effect a reverse stock split) to ensure that a sufficient number of authorized but unissued shares of Common Stock are available to permit the conversion in full of the Preferred Stock into the Shares (the “Share Authorization”) and (ii) thereafter, the Company will not issue other shares of its Common Stock, or reduce the total number of authorized shares of Common Stock under the Charter, such that the remaining number of authorized but unissued shares of Common Stock under the Charter is less than the number of the Shares.

We express no opinion concerning any laws of any state or jurisdiction other than those provisions of the General Corporation Law of the State of Delaware, including the statutory provisions, all applicable provisions of the Delaware Constitution, and the reported judicial decisions interpreting the foregoing (the “DGCL”), which, in the experience of our attorneys who are members of the bar in New York, in the exercise of customary professional diligence, are normally applicable to transactions of the type contemplated in the Purchase Agreement, but without our having made any special investigation concerning any other law, rule or regulation, in each case in effect on the date hereof. With respect to our opinion based on the DGCL, our examination has been limited to a review of such laws as reported in standard, unofficial compilations. Our opinion is based on these laws as in effect on the date hereof. No opinion is expressed herein with respect to the qualification of the Shares under the securities or blue sky laws of any state or foreign jurisdiction.

With respect to our opinions expressed below regarding the Shares issuable upon conversion of the Preferred Stock, we have assumed that at or prior to the time of issuance of such Shares, the Registration Statement will not have been modified, withdrawn or deregistered and that there will not have occurred any change in law affecting the validity of the issuance of such Shares.

Based upon the foregoing, and subject to the qualifications, assumptions (including the completion of the Share Authorization), and limitations set forth herein, we are of the opinion that the Shares issuable upon conversion of the Preferred Stock, when issued pursuant to the terms of the Charter and the Certificate of Designation, will be validly issued, fully paid and nonassessable.

The opinions expressed in this letter are limited to the matters set forth in this letter, and no other opinion should be inferred beyond the matters expressly stated. This letter is rendered as of the date hereof and we disclaim any undertaking to advise you hereafter of any facts, circumstances, events or developments hereafter occurring or coming to our attention which may alter, affect or modify the opinions expressed herein.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and to the reference to this firm under the caption “Legal Matters” in the Registration Statement. In giving such consent, we do not hereby admit that we are acting within the category of persons whose consent is required under Section 7 of the Act or the rules or regulations of the SEC thereunder (including Item 509 of Regulation S-K).

Very truly yours,

/s/ **DLA Piper LLP (US)**

---

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of Jasper Therapeutics, Inc. of our report dated March 30, 2026 relating to the financial statements, which appears in Jasper Therapeutics, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2025. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

San Jose, CA

October 14, 2026

**CONSENT OF INDEPENDENT ACCOUNTANT**

We consent to the incorporation by reference in this Registration Statement of Jasper Therapeutics, Inc. on Form S-3 to be filed on or about October 14, 2026 of our report dated October 1, 2026, on our audits of Kira Pharmaceuticals' financial statements as of December 31, 2025 and 2024 and for each of the years then ended, which report was included in the Jasper Therapeutics Form 8-K/As filed on October 1, 2026 and October 5, 2026. Our report includes an explanatory paragraph about the existence of substantial doubt concerning Kira Pharmaceuticals' ability to continue as a going concern. We also consent to the reference to our firm under the caption "Experts" in this Registration Statement.

*/s/ EisnerAmper LLP*

EISNERAMPER LLP  
Iselin, New Jersey  
October 14, 2026

## CALCULATION OF FILING FEE TABLES

S-3

Jasper Therapeutics, Inc.

Table 1: Newly Registered and Carry Forward Securities

| Line Item Type                     | Security Type | Security Class Title                       | Notes | Fee Calculation Rule | Amount Registered | Proposed Maximum Offering Price Per Unit | Maximum Aggregate Offering Price | Fee Rate | Amount of Registration Fee |
|------------------------------------|---------------|--------------------------------------------|-------|----------------------|-------------------|------------------------------------------|----------------------------------|----------|----------------------------|
| <i>Newly Registered Securities</i> |               |                                            |       |                      |                   |                                          |                                  |          |                            |
| Fees to be Paid                    | Equity        | Common Stock, par value \$0.0001 per share | (1)   | Other                | 284,013,011       | \$ 0.56                                  | \$ 159,047,286.16                | 0.000087 | \$ 13,837.11               |
| Total Offering Amounts:            |               |                                            |       |                      |                   |                                          | \$ 159,047,286.16                |          | 13,837.11                  |
| Total Fees Previously Paid:        |               |                                            |       |                      |                   |                                          |                                  |          | 0.00                       |
| Total Fee Offsets:                 |               |                                            |       |                      |                   |                                          |                                  |          | 0.00                       |
| Net Fee Due:                       |               |                                            |       |                      |                   |                                          |                                  |          | <u>\$ 13,837.11</u>        |

Offering Note(s)

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the “Securities Act”), this registration statement also covers any additional securities that may be offered or issued in connection with any stock dividend, stock split, recapitalization or similar transaction.

Pursuant to Rule 457(c) under the Securities Act, and solely for the purpose of calculating the registration fee, the proposed maximum offering price per share is \$0.56, which is the average of the high and low prices of the registrant's common stock, par value \$0.0001 per share (“Common Stock”) on October 9, 2026, on the Nasdaq Capital Market.

Consists of 284,013,011 shares of Common Stock issuable upon the conversion of 4,655,951 shares of the Company’s non-voting convertible preferred stock.