

PROSPECTUS SUPPLEMENT
(To Prospectus dated May 19, 2023)

KIROMIC BIOPHARMA, INC.

This Prospectus Supplement (the “Supplement”) amends the Prospectus dated May 19, 2023 (the “Prospectus”) filed by Kiromic Biopharma, Inc. This Supplement should be read in conjunction with the Prospectus, a copy of which is to be delivered with this Supplement. This Supplement amends only those sections of the Prospectus listed in this Supplement; all other sections of the Prospectus remain as is.

The Prospectus relates to the resale from time to time of up to 1,302,083 shares of common stock, par value \$0.001 per share (the “Common Stock”), of Kiromic Biopharma, Inc., a Delaware corporation (“Kiromic”), by YA II PN, LTD, a Cayman Island limited partnership (the “Selling Securityholder”).

Our Common Stock is listed on the Nasdaq Capital Market under the symbol “KRBP”. On May 12, 2023, the last reported sales price per share of our Common Stock was \$3.84.

Investing in our securities involves a high degree of risk. You should read the “Risk Factors” section beginning on page 11 of Prospectus and in the documents incorporated by reference in the Prospectus supplement for a discussion of factors to consider before deciding to invest in our common stock.

The date of this Prospectus Supplement is May 25, 2023

The purpose of this Supplement is to update the following sections of the Prospectus: the Prospectus cover page and the sections “Overview—YA Purchase Agreement”, “Risk Factors”, “Committed Equity Financing” and “Selling Securityholder” to correct certain disclosures in such sections.

The following amendments to the Prospectus are made by this Supplement:

COVER PAGE

Expiration Period of Facility

The third sentence on the prospectus cover page which currently reads:

“As consideration for the Selling Securityholder’s irrevocable commitment to purchase shares of our Common Stock at our election and in our discretion from time to time after the date of this prospectus and prior to the first day of the month next following the 36-month anniversary of the date on which this registration statement has been declared effective by the Securities and Exchange Commission, upon the terms and subject to the satisfaction of the conditions set forth in the YA Purchase Agreement, we have agreed to issue to the Selling Securityholder 20,111 shares of Common Stock pursuant to the terms of the YA Purchase Agreement (the “Commitment Shares”)”

is hereby deleted in its entirety and replaced with:

“As consideration for the Selling Securityholder’s irrevocable commitment to purchase shares of our Common Stock at our election and in our discretion from time to time after the date of this prospectus until November 1, 2024 upon the terms and subject to the satisfaction of the conditions set forth in the YA Purchase Agreement, we have agreed to issue to the Selling Securityholder 20,111 shares of Common Stock pursuant to the terms of the YA Purchase Agreement (the “Commitment Shares”).”

PROSPECTUS SUMMARY -OVERVIEW—YA PURCHASE AGREEMENT

Expiration Period of Facility

The third sentence in the first paragraph of this section which currently reads:

“Upon the satisfaction of the conditions to YA II’s purchase obligations set forth in the YA Purchase Agreement, we will have the right, but not the obligation, from time to time at our discretion until the first day of the month next following the 36-month anniversary of the date on which the initial registration statement filed with respect to the YA Purchase has been declared effective by the to direct YA II to purchase a specified amount of shares of Common Stock (each such sale, a “YA Advance”) by delivering written notice to YA II (each, a “YA Advance Notice”).”

is hereby deleted in its entirety and replaced with:

“Upon the satisfaction of the conditions to YA II’s purchase obligations set forth in the YA Purchase Agreement, we will have the right, but not the obligation, from time to time at our discretion until November 1, 2024 to direct YA II to purchase a specified amount of shares of Common Stock (each such sale, a “YA Advance”) by delivering written notice to YA II (each, a “YA Advance Notice”).”

Advance Limit

The first sentence of the second paragraph in this section which currently reads:

“While there is no mandatory minimum amount for any YA Advance, a YA Advance may be for a number of shares of Common Stock not to exceed 200% of the average of the daily trading volume of the Common Stock on the Nasdaq Capital Market during regular trading hours as reported by Bloomberg L.P. during the five trading days immediately preceding the date of the YA Advance Notice.”

is hereby deleted in its entirety and replaced with:

“While there is no mandatory minimum amount for any YA Advance, a YA Advance may be for an amount not to exceed the greater of (i) 100% of the average of the daily trading value of the Common Stock on the Nasdaq Capital

Market during regular trading hours as reported by Bloomberg L.P. during the five trading days immediately preceding the date of the YA Advance Notice, or (ii) \$1,000,000 worth of shares.”

Purchase Price

The second sentence of the second paragraph under this section which currently reads:

“The shares of Common Stock, if any, that we elect to sell to YA II pursuant to a YA Advance will be purchased at a price equal to 98% of the lowest daily VWAP (as defined below) during the two consecutive trading days commencing on the date of delivery of a YA Advance Notice.”

is hereby deleted in its entirety and replaced with:

“The shares of Common Stock, if any, that we elect to sell to YA II pursuant to a YA Advance will be purchased at a price equal to 95% of the lowest daily VWAP (as defined below) during the three consecutive trading days commencing on the date of delivery of a YA Advance Notice.”

RISK FACTORS

Under “Risk Factors—Risks Related to this Offering--- *It is not possible to predict the actual number of shares we will sell under the YA Purchase Agreement to the Selling Securityholder, or the actual gross proceeds resulting from those sales. Further, we may not have access to the full amount available under the YA Purchase Agreement with the Selling Securityholder,*” the second sentence of the fifth paragraph which currently reads:

“In addition, the Selling Securityholder will not be required to purchase any shares of our Common Stock if such sale or additional sale would result in the Selling Securityholder’s beneficial ownership exceeding 9.99% of the then outstanding voting power or number of Common Stock.”

is hereby deleted in its entirety and replaced with:

“In addition, the Selling Securityholder will not be required to purchase any shares of our Common Stock if such sale or additional sale would result in the Selling Securityholder’s beneficial ownership exceeding 4.99% of the then outstanding voting power or number of Common Stock.”

COMMITTED EQUITY FINANCING

Expiration Period of Facility

The second sentence of the second paragraph under this section which currently reads:

“From and after such date, we will have the right, but not the obligation, from time to time at our discretion until the first day of the month next following the 24-month anniversary of the date on which this registration statement has been declared effective by the SEC, to purchase a number of shares of Common Stock not to exceed 100% of the average of the daily trading volume of the Common Stock on Nasdaq during regular trading hours as reported by Bloomberg L.P during the five trading days immediately preceding the date of the Advance Notice as described further below under the heading “—Advances and Payments of Common Stock Under the YA Purchase Agreement.” or \$1,000,000.”

is hereby deleted in its entirety and replaced with:

“From and after such date, we will have the right, but not the obligation, from time to time at our discretion until November 1, 2024, to sell shares of Common Stock in an amount not to exceed the greater of (i) 100% of the average of the daily trading value of the Common Stock on Nasdaq during regular trading hours as reported by Bloomberg L.P during the five trading days immediately preceding the date of the Advance Notice, or (ii) \$1,000,000 as described further below under the heading “—Advances and Payments of Common Stock Under the YA Purchase Agreement.”

Blocker

The second sentence of the third paragraph under this section which currently reads:

“Moreover, we may not issue or sell any shares of Common Stock to the Selling Securityholder under the A Purchase Agreement which, when aggregated with all other shares of Common Stock then beneficially owned by the Selling Securityholder and its affiliates (as calculated pursuant to Section 13(d) of the Exchange Act and Rule 13d-3 promulgated thereunder), would result in the Selling Securityholder beneficially owning shares of Common Stock in excess of the 9.99% Beneficial Ownership Limitation.”

is hereby deleted in its entirety and replaced with:

“Moreover, we may not issue or sell any shares of Common Stock to the Selling Securityholder under the A Purchase Agreement which, when aggregated with all other shares of Common Stock then beneficially owned by the Selling Securityholder and its affiliates (as calculated pursuant to Section 13(d) of the Exchange Act and Rule 13d-3 promulgated thereunder), would result in the Selling Securityholder beneficially owning shares of Common Stock in excess of the 4.99% Beneficial Ownership Limitation.”

Expense Reimbursement

The first sentence of the fourth paragraph under this section which currently reads:

“As consideration for the Selling Securityholder’s commitment to purchase shares of Common Stock at our direction upon the terms and subject to the conditions set forth in the YA Purchase Agreement, we issued 20,111 Commitment Shares to the Selling Securityholder and paid \$10,000 to YA Principal Investments, LLC, a subsidiary of the Selling Securityholder.”

is hereby deleted in its entirety and replaced with:

“As consideration for the Selling Securityholder’s commitment to purchase shares of Common Stock at our direction upon the terms and subject to the conditions set forth in the YA Purchase Agreement, we issued 20,111 Commitment Shares to the Selling Securityholder and paid \$10,000 to YA Global II SPV, LLC, a subsidiary of the Selling Securityholder.”

Expiration Period of Facility

The first sentence under the first paragraph under the subsection “Advances of Common Stock Under the YA Purchase Agreement” of this section which currently reads:

“We will have the right, but not the obligation, from time to time at our discretion, until the first day of the month next following the 24-month anniversary of the date on which this registration statement has been declared effective by the SEC, to direct the Selling Securityholder to purchase up to a specified maximum amount of shares of Common Stock as set forth in the YA Purchase Agreement by delivering an irrevocable written notice to the Selling Securityholder (each, an “Advance Notice”) on any trading day (each, an “Advance Notice Date”), so long as:”

is hereby replaced in its entirety with:

“We will have the right, but not the obligation, from time to time at our discretion, until November 1, 2024, to direct the Selling Securityholder to purchase up to a specified maximum amount of shares of Common Stock as set forth in the YA Purchase Agreement by delivering an irrevocable written notice to the Selling Securityholder (each, an “Advance Notice”) on any trading day (each, an “Advance Notice Date”), so long as:”

SELLING SECURITYHOLDERS

This section is revised by deleting the table and related footnotes in their entirety and inserting the following table and related footnotes in lieu thereof:

Name of Selling Securityholder	Number of Shares of Common Stock Beneficially Owned		Maximum Number of Shares of Common Shares Being Offered ⁽¹⁾	Shares of Common Stock Beneficially Owned After the Offered Shares of Common Stock Are Sold	
	Number ⁽¹⁾	Percent		Number ⁽²⁾	Percent
YA II PN Ltd. ⁽³⁾	-	-	1,302,083	-	*

* Less than one percent.

- (1) In accordance with Rule 13d-3(d) under the Exchange Act, we have excluded from the number of shares beneficially owned prior to the offering all of the shares that the Selling Securityholder may be required to purchase under the YA Purchase Agreement, because the issuance of such shares is at our discretion and is subject to conditions contained in the YA Purchase Agreement, the satisfaction of which are entirely outside of the Selling Securityholder's control, including the registration statement that includes this prospectus becoming and remaining effective. Furthermore, the Advances and Additional Advances of Common Stock under the YA Purchase Agreement are subject to certain agreed upon maximum amount limitations set forth in the YA Purchase Agreement. Also, the YA Purchase Agreement prohibits us from issuing and selling any shares of our Common Stock to the Selling Securityholder to the extent such shares, when aggregated with all other shares of our Common Stock then beneficially owned by the Selling Securityholder, would cause the Selling Securityholder's beneficial ownership of our Common Stock to exceed the 4.99% Beneficial Ownership Limitation.
- (2) Assumes the sale of all shares being offered pursuant to this prospectus.
- (3) YA II PN, Ltd. is a fund managed by Yorkville Advisors Global, LP ("Yorkville LP"). Yorkville Advisors Global II, LLC ("Yorkville LLC") is the General Partner of Yorkville LP. All investment decisions for YA II PN, Ltd. are made by Yorkville LLC's President and Managing Member, Mr. Mark Angelo. The business address of YA II PN, Ltd. is 1012 Springfield Avenue, Mountainside, NJ 07092.