PROSPECTUS SUPPLEMENT

(To Prospectus Dated May 11, 2023)



Up to \$6,916,688 Common Stock

This prospectus supplement amends and supplements the information in the sales agreement prospectus, dated May 11, 2023, filed with the Securities and Exchange Commission as a part of our registration statement on Form S-3 (File No. 333-270263), which we refer to as the Prior Prospectus, relating to the offer and sale of up to \$40,000,000 of shares of our common stock, par value \$0.001 per share, pursuant to the Open Market Sale AgreementSM, or the Sales Agreement, we previously entered into with Jefferies LLC, or Jefferies. This prospectus supplement should be read in conjunction with the Prior Prospectus, and is qualified by reference thereto, except to the extent that the information herein amends or supersedes the information contained in the Prior Prospectus. This prospectus supplement is not complete without, and may only be delivered or utilized in connection with, the Prior Prospectus and any future amendments or supplements thereto.

As of the date of this prospectus supplement, we have sold 485,634 shares of our common stock for aggregate gross sale proceeds of \$8,716,256.20 in accordance with the Sales Agreement under the Prior Prospectus. We are filing this prospectus supplement to amend the Prior Prospectus because we are now subject to General Instruction I.B.6 of Form S-3, which limits the amounts that we may sell under the registration statement of which this prospectus supplement and the Prior Prospectus are a part. After giving effect to these limitations and the current market value of shares of our common stock held by non-affiliates, and after giving effect to the terms of the Sales Agreement, we currently may offer and sell shares of our common stock having an aggregate offering price of up to \$6,916,688 under the Sales Agreement. If the market value of our common stock held by non-affiliates increases such that we may sell a greater amount of common stock under the Sales Agreement and the registration statement of which this prospectus supplement and the Prior Prospectus are a part, we will file another prospectus supplement prior to making such sales.

Our common stock is listed on The Nasdaq Capital Market under the symbol "KALA." On March 28, 2024, the last sale price of our common stock as reported on The Nasdaq Capital Market was \$7.97 per share.

The aggregate market value of our common stock held by non-affiliates as of March 29, 2024 pursuant to General Instruction I.B.6 of Form S-3 is \$20,750,064, which was calculated based on 2,593,758 shares of our common stock outstanding held by non-affiliates and at a price of \$8.00 per share, the closing price of our common stock on March 21, 2024. As of the date hereof, we have not offered or sold any securities pursuant to General Instruction I.B.6 of Form S-3 during the prior 12 calendar month period that ends on and includes the date hereof. As a result of the limitations of General Instruction I.B.6 of Form S-3, and in accordance with the terms of the Sales Agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to \$6,916,688 from time to time through Jefferies.

Investing in our common stock involves significant risks. See "Risk Factors" beginning on page SA-7 of the Prior Prospectus and in the documents incorporated by reference in the Prior Prospectus for a discussion of the factors you should carefully consider before deciding to purchase our common stock.

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

Jefferies

The date of this prospectus supplement is March 29, 2024.