

Prospectus

583,334 Shares of Common Stock



LIXTE BIOTECHNOLOGY HOLDINGS, INC.

Common Stock

Pursuant to this prospectus, the selling stockholder identified herein is offering on a resale basis 583,334 shares of our common stock, par value \$0.0001 per share, issuable upon exercise of certain common stock warrants (the “Warrants”). We issued the Warrants in an exempt private offering (the “Private Placement”) pursuant to a securities purchase agreement, dated July 20, 2023 (the “Purchase Agreement”) with the selling stockholder. We will not receive any of the proceeds from the sale by the selling stockholder of the common stock. However, upon exercise of the Warrants by payment of cash, we will receive the exercise price of the Warrants.

The selling stockholder may sell or otherwise dispose of the common stock covered by this prospectus in a number of different ways and at varying prices. We provide more information about how the selling stockholder may sell or otherwise dispose of the common stock covered by this prospectus in the section entitled “Plan of Distribution”. Discounts, concessions, commissions and similar selling expenses attributable to the sale of common stock covered by this prospectus will be borne by the selling stockholder. We will pay all expenses (other than discounts, concessions, commissions and similar selling expenses) relating to the registration of the common stock with the Securities and Exchange Commission, or the SEC.

You should carefully read this prospectus and any accompanying prospectus supplement, together with the documents we incorporate by reference, before you invest in our common stock.

Our common stock is listed on The Nasdaq Capital Market under the symbol “LIXT”. On April 30, 2024, the last reported sale price for our common stock was \$2.76 per share.

**Investing in common stock involves risk. Please read carefully the section entitled “[Risk Factors](#)” beginning on page 2 of 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 May 3, 2024.

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**About This Prospectus**

This prospectus is part of a registration statement that we filed with the SEC utilizing a “shelf” registration process. Under this shelf registration process, the selling stockholder may sell the securities described in this prospectus in one or more offerings. A prospectus supplement may add to, update or change the information contained in this prospectus. You should read this prospectus and any applicable prospectus supplement, together with the information incorporated herein by reference as described under the headings “Where You Can Find More Information” and “Information We Incorporate by Reference”.

You should rely only on the information that we have provided or incorporated by reference in this prospectus and any applicable prospectus supplement. We have not authorized, nor has the selling stockholder authorized, any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus or any applicable prospectus supplement. You should not rely upon any information or representation not contained or incorporated by reference in this prospectus or any accompanying prospectus supplement. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you.

This prospectus and any accompanying prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and any accompanying prospectus supplement 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 or any applicable prospectus supplement is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus or any applicable prospectus supplement is delivered or securities are sold on a later date.

References in this prospectus to the terms “Lixte”, “we”, “us”, “our” or the “Company” or other similar terms refer collectively to Lixte Biotechnology Holdings, Inc. and its consolidated subsidiary, unless we state otherwise or the context indicates otherwise.

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## Prospectus Summary

*This summary highlights certain information appearing elsewhere in this prospectus and in the documents we incorporate by reference into this prospectus. The summary is not complete and does not contain all of the information that you should consider before investing in our common stock. After you read this summary, you should read and consider carefully the entire prospectus and any prospectus supplement and the more detailed information and financial statements and related notes that are incorporated by reference into this prospectus supplement. If you invest in our common stock, you are assuming a high degree of risk.*

## Company Overview

We are a clinical-stage biopharmaceutical company dedicated to improving patients’ lives by developing a drug class called Protein Phosphatase 2A inhibitors.

Our product pipeline is primarily focused on inhibitors of protein phosphatase 2A, used in combination with cytotoxic agents and/or x-ray, immune checkpoint blockers and other cancer therapies. We believe that inhibitors of protein phosphatases have significant therapeutic potential for a broad range of cancers. We are focusing on the clinical development of a specific protein phosphatase inhibitor, referred to as LB-100, which has been shown to have clinical anti-cancer activity at doses that produce little or no toxicity.

Our activities are subject to significant risks and uncertainties, including the need for additional capital. We have not yet commenced any revenue-generating operations, do not have positive cash flows from operations, rely on stock-based compensation for a substantial portion of employee and consultant compensation, and are dependent on periodic infusions of equity capital to fund its operating requirements.

## Corporate Information

We are incorporated in Delaware, and our corporate office is located at 680 East Colorado Boulevard, Suite 180, Pasadena, California 91101. Our telephone number is (631) 830-7092. Our corporate website address is [www.lixte.com](http://www.lixte.com). Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

Our common stock and warrants trade on The Nasdaq Capital Market under the symbols “LIXT” and “LIXTW”, respectively.

Our principal Internet address is [www.lixte.com](http://www.lixte.com). Information contained on, or that can be accessed through, our website, is not, and shall not be deemed to be, incorporated in this prospectus or considered a part thereof. We make available free of charge on [www.lixte.com](http://www.lixte.com) our annual, quarterly and current reports, and amendments to those reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at <http://www.sec.gov>.

## Private Placement

On July 20, 2023, we entered into a securities purchase agreement (the “Purchase Agreement”) with the selling stockholder pursuant to which we agreed to issue and sell warrants (the “Warrants”) to purchase an aggregate of up to 583,334 shares of common stock. The Warrants are exercisable beginning on the date of issuance at a price per share of \$6.00 and will expire five years thereafter.

Pursuant to the Purchase Agreement, the Company agreed to file a registration statement on Form S-3 for the resale by the selling stockholder of the shares of common stock issuable upon exercise of the Warrants.

We are filing the registration statement of which this prospectus forms a part to satisfy our obligations under the Purchase Agreement.

## Risk Factors

Investing in our common stock involves risk. Prior to making a decision about investing in our common stock, you should carefully consider the risk factors discussed under the heading “Risk Factors” in our most recent Annual Report on Form 10-K, which is incorporated herein by reference and may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. If any of these risks actually occurs, our business, results of operations and financial condition could suffer. In that case, the trading price of our common stock could decline, and you could lose all or a part of your investment.

## Cautionary Note Regarding Forward-Looking Statements

This prospectus, any accompanying prospectus supplement, and the documents incorporated by reference herein and therein may contain forward looking statements that involve risks and uncertainties. All statements other than statements of historical fact contained in this prospectus, any accompanying prospectus supplement and the documents incorporated by reference herein and therein, including statements regarding future events, our future financial performance, business strategy, and plans and objectives of management for future operations, are forward-looking statements. We have attempted to identify forward-looking statements by terminology including “anticipates”, “believes”, “can”, “continue”, “could”, “estimates”, “expects”, “intends”, “may”, “plans”, “potential”, “predicts”, “should” or “will” or the negative of these terms or other comparable terminology. Although we do not make forward looking statements unless we believe we have a reasonable basis for doing so, we cannot guarantee their accuracy. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks outlined under “Risk Factors” or elsewhere in this prospectus, the any accompanying prospectus supplement and the documents incorporated by reference herein and therein, which may cause our or our industry’s actual results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Moreover, we operate in a highly regulated, very competitive, and rapidly changing environment. New risks emerge from time to time and it is not possible for us to predict all risk factors, nor can we address the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause our actual results to differ materially from those contained in any forward-looking statements.

We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our

financial condition, results of operations, business strategy, short term and long-term business operations, and financial needs. These forward-looking statements are subject to certain risks and uncertainties that could cause our actual results to differ materially from those reflected in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed (i) in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, (ii) in this prospectus and (iii) in other documents we file with the SEC. The following discussion should be read in conjunction with the consolidated financial statements for the fiscal years ended December 31, 2023 and 2022 and the notes incorporated by reference herein. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statement.

You should not place undue reliance on any forward-looking statement, each of which applies only as of the date of this prospectus. You are advised to consult any further disclosures we make on related subjects in our reports on Forms 10-Q, 8-K and 10-K filed with the SEC.

### Use of Proceeds

We will not receive any of the proceeds from any sale or other disposition of the common stock covered by this prospectus. All proceeds from the sale of the common stock will be paid directly to the selling stockholder. However, we will receive proceeds upon the cash exercise of the Warrants. Assuming full cash exercise of the Warrants, we would receive approximately \$3.5 million. We currently intend to use any cash proceeds from a Warrant exercise for working capital and continuing operating expenses, including, without limitation, for further clinical development of our lead compound LB-100.

### Description of Capital Stock

#### Common Stock

We are authorized to issue up to a total of 100,000,000 shares of common stock, par value \$0.0001 per share. Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of our stockholders. Holders of our common stock have no cumulative voting rights.

Further, holders of our common stock have no pre-emptive or conversion rights or other subscription rights. Upon our liquidation, dissolution or winding-up, holders of our common stock are entitled to share in all assets remaining after payment of all liabilities and the liquidation preferences of any of our outstanding shares of preferred stock. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of our assets which are legally available. Each outstanding share of our common stock is, and all shares of common stock to be issued in this offering when they are paid for will be, fully paid and non-assessable.

The holders of 33-1/3% of the shares of our common stock outstanding, represented in person or by proxy, are necessary to constitute a quorum for the transaction of business at any meeting. Except in regards to proposals that require the approval of the majority of the issued and outstanding shares, if a quorum is present, an action by stockholders entitled to vote on a matter is approved if the number of votes cast in favor of the action exceeds the number of votes cast in opposition to the action, with the exception of the election of directors, which requires a plurality of the votes cast.

#### Preferred Stock

Our Board of Directors has the authority, without further action by the stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the designations, powers, preferences, privileges, and relative participating, optional, or special rights as well as the qualifications, limitations, or restrictions of the preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, and liquidation preferences, any or all of which may be greater than the rights of the common stock. Our Board of Directors, without stockholder approval, will be able to issue convertible preferred stock with voting, conversion, or other rights that could adversely affect the voting power and other rights of the holders of common stock. Preferred stock could be issued quickly with terms calculated to delay or prevent a change of control or make removal of management more difficult. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock, and may adversely affect the voting and other rights of the holders of common stock. At present, we have no plans to issue any shares of preferred stock following this offering.

We have designated a total of 350,000 shares as our Series A Convertible Preferred Stock which are non-voting and not subject to increase without the written consent of a majority of the holders of such series. The holders of each tranche of 175,000 shares are entitled to receive a per share dividend equal to 1% of our annual net revenue divided by 175,000, until converted or redeemed. Each share of Series A Convertible Preferred Stock may be converted, at the option of the holder, into 0.20833 shares of common stock (subject to customary anti-dilution provisions), and are subject to mandatory conversion at the conversion rate in the event of a merger or sale transaction resulting in gross proceeds to us of at least \$21,875,000. Each share has a liquidation preference based on its assumed conversion into shares of common stock.

Our Board of Directors will fix the designations, voting powers, rights, preferences and privileges of each series, as well as the qualifications, limitations or restrictions thereof, of the preferred stock of each series that we offer under this prospectus and applicable prospectus supplements in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of that series of preferred stock. This description will include:

- the title and stated value;
- the number of shares being offered;
- the liquidation preference per share;
- the purchase price per share;
- the dividend rate per share, dividend period and payment dates and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- our right, if any, to defer payment of dividends and the maximum length of any such deferral period;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;

- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into common stock, and the conversion rate or conversion price, or how they will be calculated, and the exchange period;
- voting rights, if any, of the preferred stock;
- preemption rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- a discussion of any material or special United States federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- the limitations on issuances of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock being issued as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, rights, preferences, privileges, qualifications or restrictions of the preferred stock.

Upon issuance, the shares of preferred stock will be fully paid and non-assessable.

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### Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Inc.

### The Nasdaq Capital Market

Our common stock is listed on The Nasdaq Capital Market under the symbol “LIXT”.

### Private Placement of Warrants

On July 20, 2023, we entered into a securities purchase agreement (the “Purchase Agreement”) with the selling stockholder pursuant to which we agreed to issue and sell warrants (the “Warrants”) to purchase an aggregate of up to 583,334 shares of common stock. The Warrants are exercisable beginning on the date of issuance at a price per share of \$6.00 and will expire five years thereafter.

Pursuant to the Purchase Agreement, the Company agreed to file a registration statement on Form S-3 for the resale by the selling stockholder of the shares of common stock issuable upon exercise of the Warrants.

We are filing the registration statement of which this prospectus forms a part to satisfy our obligations under the Purchase Agreement.

### Selling Stockholder

The common stock being offered by the selling stockholder are those issuable to the selling stockholder upon exercise of the Warrants. For additional information regarding the issuance of those Warrants, see “Private Placement of Warrants” above. We are registering the shares of Common Stock in order to permit the selling stockholder to offer the shares for resale from time to time. Except for the beneficial ownership of securities of the Company, including the Warrants, neither the selling stockholder nor any persons who have control over the selling stockholder has had any material relationship with the Company within the past three years.

The table below lists the selling stockholder and other information regarding the beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the shares of common stock by the selling stockholder. The second column lists the number of shares of common stock beneficially owned by the selling stockholder, based on its ownership of the shares of common stock, options to purchase common stock, and warrants to purchase common stock, as of April 30, 2024, assuming exercise in full of the Warrants held by the selling stockholder on that date, without regard to any limitations on exercises. The third column lists the maximum number of shares of common stock that may be sold or otherwise disposed of by the selling stockholder pursuant to the registration statement of which this prospectus forms a part. The selling stockholder may sell or otherwise dispose of some, all or none of its shares of common stock. The fourth column assumes the sale of all of the shares of common stock offered by the selling stockholder pursuant to this prospectus, without regard to any limitations on exercises.

Under the terms of the Warrants, the selling stockholder may not exercise the Warrants to the extent such exercise would cause the selling stockholder, together with its affiliates and attribution parties, to beneficially own a number of shares of common stock which would exceed 4.99% or 9.99%, as applicable, of our then outstanding shares of common stock following such exercise, excluding for purposes of such determination the shares of common stock issuable upon exercise of the Warrants which have not been exercised. The number of shares of common stock owned prior to the offering in the second column and the number of shares of common stock owned after the offering in the fourth column do not reflect this limitation. The selling stockholder may sell all, some or none of their shares of common stock in this offering. See “Plan of Distribution”.

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Name of Selling Stockholder	Number of Shares of Common Stock Owned Prior to Offering <sup>(3)</sup>	Maximum Number of Shares of Common Stock to be Sold Pursuant to this Prospectus	Shares Owned Immediately After Sale of Maximum Number of Shares in this Offering	
			Number	Percentage of Outstanding Common Stock <sup>(2)</sup>
Armistice Capital, LLC <sup>(1)</sup>	1,166,668	583,334	583,334	25.93%
<b>Total</b>	<b>1,166,668</b>	<b>583,334</b>	<b>583,334</b>	<b>25.93%</b>

(1) The securities are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the “Master Fund”), and may be deemed to be beneficially

owned by: (i) Armistice Capital, LLC (“Armistice Capital”), as the investment manager of the 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 Capital Master Fund Ltd. is c/o Armistice Capital, LLC, 510 Madison Avenue, 7<sup>th</sup> Floor, New York, New York 10022.

(2) Percentages are based on 2,249,290 shares of common stock outstanding on April 30, 2024.

(3) Consists of an aggregate of shares of common stock beneficially owned and is comprised of (i) 180,000 shares of common stock; (ii) 403,334 shares of common stock that were issuable upon exercise of pre-funded warrants that were exercised during the period from July 24, 2023 through August 7, 2023; and (iii) 583,334 shares of common stock that are currently issuable upon the exercise of the Warrants.

#### **Plan of Distribution**

The selling stockholder and any of its pledges, assignees and successors-in-interest may from time to time, sell any or all of their shares of common stock covered hereby on The Nasdaq Capital Market or any other stock exchange, market or trading facility on which the common stock is traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholder may use any one or more of the following methods when selling shares of common stock:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the 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;
- in transactions through broker-dealers that agree with the selling stockholder to sell a specified number of shares of common stock at a stipulated price per share;
- through the written settlement of options or other hedging transactions, whether through an options exchange or otherwise;

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- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The selling stockholder may also sell shares of common stock under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

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

In connection with the sale of the shares of common stock covered by this prospectus or interests therein, the selling stockholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the shares of common stock in the course of hedging the positions they assume. The selling stockholder may also sell shares of common stock short and deliver these shares to close out their short positions, or loan or pledge the shares to broker-dealers that in turn may sell these shares. The selling stockholder may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares of common stock covered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholder and any broker-dealers or agents that are involved in selling the shares of common stock covered hereby may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the shares of common stock.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the shares of common stock covered hereby. The Company has agreed to indemnify the selling stockholder against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep the registration statement of which this prospectus forms a part effective until the selling stockholder does not own any Warrants or common stock issuable upon exercise thereof. The shares of common stock will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the shares of common stock covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the shares of common stock covered hereby may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholder will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common stock by the selling stockholder or any other person. We will make copies of this prospectus available to the selling stockholder and have informed it of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

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#### **Legal Matters**

The validity of the shares of common stock offered hereby will be passed upon for us by TroyGould PC, Los Angeles, California.

## Experts

The consolidated financial statements of Lixte Biotechnology Holdings, Inc. appearing in Lixte Biotechnology Holdings, Inc.'s Annual Report on Form 10-K for the fiscal year ended December 31, 2023 have been audited by Weinberg & Company, P.A., an independent registered public accounting firm, as stated in their report thereon, which includes an explanatory paragraph as to the Company's ability to continue as a going concern. Such financial statements have been incorporated herein by reference in reliance on such report given on the authority of such firm as experts in auditing and accounting.

## Where You Can Find More Information

We file annual, quarterly and current reports, proxy statements and other information with the SEC, which are available at the SEC's website at <http://www.sec.gov>. In addition, we maintain a website that contains information about us at <http://www.lixte.com>. The information found on, or otherwise accessible through, our website is not incorporated into, and does not form a part of, this prospectus supplement or any other report or document we file with or furnish to the SEC.

We have filed with the SEC a registration statement on Form S-3 (File No. 333- ) under the Securities Act with respect to the shares of common stock offered by this prospectus supplement. When used in this prospectus supplement, the term "registration statement" includes amendments to the registration statement as well as the exhibits, schedules, financial statements and notes filed as part of the registration statement or incorporated by reference therein. This prospectus supplement, which constitutes a part of the registration statement, omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information on us and our consolidated subsidiaries and the common stock we are offering by this prospectus supplement. Statements herein concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC's website.

## Information We Incorporate By Reference

The SEC allows us to "incorporate by reference" into this prospectus the information in documents we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in or omitted from this prospectus or any accompanying prospectus supplement, or in any other subsequently filed document, which also is or is 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.

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We incorporate by reference the documents listed below and any future documents that we file with the SEC (excluding any portion of such documents that are furnished and not filed with the SEC) under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (1) after the date of the initial filing of the registration statement of which this prospectus forms a part prior to the effectiveness of the registration statement, and (2) after the date of this prospectus until the offering of the securities is terminated:

- Our Current Reports on Form 8-K, as filed with the SEC on [March 22, 2024](#) and [March 28, 2024](#);
- Our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2023, as filed with the SEC on March 19, 2024.

We will not, however, incorporate by reference in this prospectus any documents or portions thereof that are not deemed "filed" with the SEC, including any information furnished pursuant to Item 2.02 or Item 7.01 of our Current Reports on Form 8-K unless, and except to the extent, specified in such current reports.

We will provide you with a copy of any of these filings (other than an exhibit to these filings, unless the exhibit is specifically incorporated by reference into the filing requested) at no cost, if you submit a request to us by writing or telephoning our Investor Relations department at the following address and telephone number:

Lixte Biotechnology Holdings, Inc.  
680 East Colorado Boulevard, Suite 180  
Pasadena, California 91101  
(631) 830-7092

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**LIXTE BIOTECHNOLOGY HOLDINGS, INC.**

**583,334 Shares of Common Stock**

**Prospectus**

**May 3, 2024**

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