UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No. __)

Filed by the Registrant 🗵

Filed by a party other than the Registrant \Box

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- □ Soliciting Material under §240.14a-12

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

(Name of Registrant as Specified in Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- \Box Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - (1) Title of each class of securities to which transaction applies:
 - (2) Aggregate number of securities to which transaction applies:
 - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
 - (4) Proposed maximum aggregate value of transaction:
 - (5) Total fee paid:

□ Fee paid previously with preliminary materials.

- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
 - (1) Amount Previously Paid:
 - (2) Form, Schedule or Registration Statement No.:
 - (3) Filing Party:
 - (4) Date Filed:

Lixte Biotechnology Holdings, Inc. 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101

NOTICE OF 2024 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON DECEMBER 19, 2024

November 8, 2024

To the stockholders of Lixte Biotechnology Holdings, Inc.:

(1) To elect the five nominees for director named herein;

- (2) To ratify the appointment of Weinberg & Company, P.A. as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2024;
- (3) To approve, on an advisory basis, the compensation of the Company's named executive officers, as disclosed in the Proxy Statement; and
- (4) To transact other business that may properly come before the meeting and any postponement(s) or adjournment(s) thereof.

The accompanying proxy statement contains additional information and should be carefully reviewed by stockholders.

To accommodate our stockholders, the Annual Meeting will be a completely virtual meeting of stockholders, conducted solely online via live webcast. You will be able to attend and participate in the Annual Meeting online and vote your shares electronically by visiting: <u>https://meetnow.global/M7J6RW5</u> at the meeting date and time described in the accompanying proxy statement. There is no physical location for the Annual Meeting. Hosting a virtual meeting will enable greater stockholder attendance and participation from any location. Questions related to the Annual Meeting or voting matters can be submitted by email to <u>info@lixte.com</u>. We encourage you to attend online and participate. We recommend that you log in a few minutes before the Annual Meeting start time of 10:00 a.m. Pacific Time on December 19, 2024, to ensure you are logged in when the Annual Meeting begins.

Pursuant to the bylaws of the Company, the Board of Directors has fixed the close of business on October 28, 2024 as the record date (the "Record Date") for determination of stockholders entitled to notice and to vote at the Annual Meeting and any adjournment thereof. Holders of the Company's Common Stock are entitled to vote at the Annual Meeting.

In accordance with rules and regulations adopted by the U.S. Securities and Exchange Commission (the "SEC"), we have elected to provide our beneficial owners and stockholders of record access to our proxy materials over the Internet. Beneficial owners are stockholders whose shares are held in the name of a broker, bank or other agent (i.e., in "street name"). Accordingly, a Notice of Internet Availability of Proxy Materials (the "Notice") will be mailed on or about November 8, 2024 to our beneficial owners and stockholders of record who owned our Common Stock at the close of business on October 28, 2024. Beneficial owners and stockholders of record will have the ability to access the proxy materials on a website referred to in the Notice or request a printed set of the proxy materials be sent to them by following the instructions in the Notice. Beneficial owners and stockholders of record who have previously requested to receive paper copies of our proxy materials will receive paper copies of the proxy materials will receive paper copies of the proxy materials will receive paper copies of the proxy materials will receive paper copies of a Notice.

BY ORDER OF THE BOARD OF DIRECTORS

/s/ Bas van der Baan Chairman of the Board

Whether or not you expect to attend the Annual Meeting, please complete, date, sign and return the proxy mailed to you, or vote over the telephone or the internet as instructed in these materials, as promptly as possible in order to ensure your representation at the meeting. A return envelope (which is postage prepaid if mailed in the United States) has been provided for your convenience. Even if you have voted by proxy, you may still vote if you attend the Annual Meeting. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the Annual Meeting, you must obtain a proxy issued in your name from that record holder.

2

TABLE OF CONTENTS

Introduction	4
Questions and Answers About these Proxy Materials and Voting	5
Proposal 1: Election of Directors	10
Information Regarding the Board of Directors and Corporate Governance	15
Proposal 2: Ratification of the Appointment of Independent Registered Public Accounting Firm	19
Proposal 3: Approval, on Advisory Basis, of Compensation of the Company's Named Executive Officers	21
Executive Officers	22
Officer Compensation	23
Pay Versus Performance	29
Compliance with Section 16(a) of the Securities Exchange Act of 1934, as Amended	31
Certain Relationships and Related Transactions	31
Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	32
Householding of Proxy Materials	35
Other Business	35

Lixte Biotechnology Holdings, Inc. 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101

December 19, 2024

INTRODUCTION

The enclosed proxy is solicited by the Board of Directors (the "Board of Directors" or "Board") of Lixte Biotechnology Holdings, Inc. (the "Company"), in connection with the 2024 Annual Meeting of Stockholders (the "Annual Meeting") of the Company, to be held on December 19, 2024, at 10:00 a.m. Pacific Time via live webcast at https://meetnow.global/M7J6RW5.

At the Annual Meeting, you will be asked to consider and vote upon the following matters:

- (1) To elect the five nominees for director named herein;
- (2) To ratify the appointment of Weinberg & Company, P.A. as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2024;
- (3) To approve, on an advisory basis, the compensation of the Company's named executive officers, as disclosed in the Proxy Statement; and
- (4) To transact other business that may properly come before the meeting and any postponement(s) or adjournment(s) thereof.

The Board of Directors has fixed the close of business on October 28, 2024 as the record date (the "Record Date") for determining stockholders entitled to notice of and to vote at the Annual Meeting and any adjournment thereof.

In accordance with rules and regulations adopted by the U.S. Securities and Exchange Commission (the "SEC"), we have elected to provide our beneficial owners and stockholders of record access to our proxy materials over the Internet. Beneficial owners are stockholders whose shares are held in the name of a broker, bank or other agent (i.e., in "street name"). Accordingly, a Notice of Internet Availability of Proxy Materials (the "Notice") will be mailed on or about November 8, 2024 to our beneficial owners and stockholders of record who owned our Common Stock at the close of business on October 28, 2024. Beneficial owners and stockholders of record will have the ability to access the proxy materials on a website referred to in the Notice or request a printed set of the proxy materials be sent to them by following the instructions in the Notice. Beneficial owners and stockholders of record who have previously requested to receive paper copies of our proxy materials will receive paper copies of the proxy materials will receive paper copies of the proxy materials will receive paper copies of the proxy materials will receive paper copies of a Notice.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE ANNUAL MEETING TO BE HELD ON DECEMBER 19, 2024: THE NOTICE, PROXY STATEMENT, PROXY CARD AND THE ANNUAL REPORT ARE AVAILABLE AT <u>HTTPS://IR.LIXTE.COM/SEC-FILINGS</u> AND AT WWW.EDOCUMENTVIEW.COM/LIXT.

4

QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

Why did I receive in the mail a Notice of Internet Availability of Proxy Materials this year instead of a full set of Proxy Materials?

We are pleased to take advantage of the SEC rule that allows companies to furnish their proxy materials over the Internet. Accordingly, we have sent to our beneficial owners and stockholders of record a Notice of Internet Availability of Proxy Materials. Instructions on how to access the proxy materials over the Internet or to request a paper copy may be found in the Notice. Our stockholders may request to receive proxy materials in printed form by mail or electronically on an ongoing basis. A stockholder's election to receive proxy materials by mail or electronically by email will remain in effect until the stockholder terminates its election.

We intend to mail the Notice on or about November 8, 2024 to all stockholders of record entitled to vote at the Annual Meeting.

Will I receive any other proxy materials by mail?

We may send you a proxy card, along with a second Notice, on or after November 8, 2024

How can I attend the Annual Meeting?

To accommodate our stockholders, the Annual Meeting will be a completely virtual meeting of stockholders, which will be conducted exclusively by webcast. You are entitled to participate in the Annual Meeting only if you were a stockholder of the Company as of the close of business on the Record Date, or if you hold a valid proxy for the Annual Meeting. No physical meeting will be held. You will be able to attend the Annual Meeting online by visiting https://meetnow.global/M7J6RW5. You also will be able to vote your shares online by attending the Annual Meeting by webcast. Questions related to the Annual Meeting or voting matters can be submitted by email to info@lixte.com.

To participate in the Annual Meeting, you will need to review the information included on your Notice, on your proxy card or on the instructions that accompanied your proxy materials. If you hold your shares through an intermediary, such as a bank or broker, you must register in advance using the instructions below.

The online meeting will begin promptly at 10:00 a.m., Pacific Time. We encourage you to access the meeting prior to the start time leaving ample time for the check in. Please follow the registration instructions as outlined in this proxy statement.

How do I register to attend the Annual Meeting virtually on the Internet?

If you are a registered stockholder (i.e., you hold your shares through our transfer agent, Computershare Trust Company, N.A.), you do not need to register to attend the Annual Meeting virtually on the Internet. Please follow the instructions on the notice or proxy card that you received. Registered stockholders can attend the meeting by accessing the meeting site at <u>https://meetnow.global/M7J6RW5</u> and entering the 15-digit control number that can be found on your Notice or proxy card mailed with the proxy materials.

If you hold your shares through an intermediary, such as a bank or broker, you must register in advance to attend the Annual Meeting virtually on the Internet. To register to attend the Annual Meeting online by webcast you must submit proof of your proxy power (legal proxy) reflecting your Lixte Biotechnology Holdings, Inc. holdings along with your name and email address to Computershare. Requests for registration must be labeled as "Legal Proxy" and be received no later than 5:00 p.m., Eastern Time, on December 16, 2024. You will receive a confirmation of your registration by email after we receive your registration materials.

5

Requests for registration should be directed to us at the following:

By email

Send an email to investorvote@computershare.com with "Proxy Materials Lixte Biotechnology Holdings, Inc." in the subject line. Include your full name and address, plus the

number located in the shaded bar on the reverse side of the Notice, and state that you want a paper copy of the meeting materials. You may also forward the email from your broker, or attach an image of your legal proxy, to legalproxy@computershare.com.

By phone

Call Computershare free of charge at 1-866-641-4276.

By internet

Go to www.envisionreports.com/LIXT. Click Cast Your Vote or Request Materials.

Who can vote at the Annual Meeting?

Only stockholders of record at the close of business on October 28, 2024 will be entitled to vote at the Annual Meeting. On this record date, there were 2,249,290 shares of common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If on October 28, 2024 your shares were registered directly in your name with the Company's transfer agent, Computershare Trust Company, N.A., then you are a stockholder of record. As a stockholder of record, you may vote at the meeting or vote by proxy. Whether or not you plan to attend the meeting, we urge you to fill out and return the enclosed proxy card to ensure your vote is counted. Registered stockholders can attend the meeting by accessing the meeting site at <u>https://meetnow.global/M7J6RW5</u> and entering the 15-digit control number that can be found on your Notice or proxy card mailed with the proxy materials.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If on October 28, 2024 your shares were held, not in your name, but rather in an account at a brokerage firm, bank, dealer or other similar organization, then you are the beneficial owner of shares held in "street name" and the Notice is being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the Annual Meeting. As a beneficial owner, you have the right to direct your broker or other agent regarding how to vote the shares in your account. You are also invited to attend the Annual Meeting. However, since you are not the stockholder of record, you may not vote your shares at the meeting unless you request and obtain a valid proxy from your broker or other agent.

What am I voting on?

There are three matters scheduled for a vote:

- To elect the five nominees for director named herein;
- To ratify the appointment of Weinberg & Company, P.A. as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2024; and
- To approve the compensation of our Executive Officers.

What if another matter is properly brought before the meeting?

The Board of Directors knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on those matters in accordance with their best judgment.

How Do I Vote?

You may either vote "For" all the nominees to the Board of Directors or you may "Withhold" your vote for any nominee you specify. For each of the other matters to be voted on, you may vote "For" or "Against" or abstain from voting.

The procedures for voting are fairly simple:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote at the Annual Meeting or vote by proxy using the enclosed proxy card. Alternatively, you may vote by proxy either by telephone or on the Internet. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the meeting and vote even if you have already voted by proxy.

• To vote using the proxy card, simply complete, sign and date the proxy card that may be delivered and return it promptly in the envelope provided. If you return your signed proxy card to us before the Annual Meeting, we will vote your shares as you direct.

• To vote over the telephone, dial toll-free 1-800-652-VOTE (<u>8683</u>) using a touch-tone phone and follow the recorded instructions. You will be asked to provide the company number and control number from the Notice. Your telephone vote must be received by 11:59 pm Pacific Time on December 18, 2024 to be counted.

• To vote through the internet, go to <u>https://www.envisionreports.com/LIXT</u> to complete an electronic proxy card. You will be asked to provide the company number and control number from the Notice. Your internet vote must be received by 11:59 pm Pacific Time on December 18, 2024 to be counted.

• To vote during the Annual Meeting, follow the instructions posted at https://meetnow.global/M7J6RW5.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank, or other agent, you should have received a Notice containing voting instructions from that organization rather than from the Company. Simply follow the voting instructions in the Notice to ensure that your vote is counted. To vote at the Annual Meeting, you must obtain a valid proxy from your broker, bank or other agent. Follow the instructions from your broker or bank included with these proxy materials, or contact your broker or bank to request a proxy form.

What if I have technical difficulties or trouble accessing the virtual Annual Meeting?

The virtual meeting platform is fully supported across browsers (MS Edge, Firefox, Chrome and Safari) and devices (desktops, laptops, tablets and cell phones) running the most up-to-date version of applicable software and plugins. Participants should ensure that they have a strong WiFi connection wherever they intend to participate in the

meeting. We encourage you to access the meeting prior to the start time. A link on the meeting page will provide further assistance should you need it or you may call 1-888-724-2416.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you own as of October 28, 2024.

What happens if I do not vote?

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record and do not vote by completing your proxy card, by telephone, through the internet or at the Annual Meeting, your shares will not be voted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

Our common stock is listed on The Nasdaq Capital Market. However, under current New York Stock Exchange ("NYSE") rules and interpretations that govern broker nonvotes, if you are a beneficial owner and do not instruct your broker, bank, or other agent how to vote your shares, the question of whether your broker or nominee will still be able to vote your shares depends on whether the NYSE deems the particular proposal to be a "routine" matter. Brokers and nominees can use their discretion to vote "uninstructed" shares with respect to matters that are considered to be "routine", but not with respect to "non-routine" matters. Under the rules and interpretations of the NYSE, "non-routine" matters are matters that may substantially affect the rights or privileges of stockholders, such as mergers, stockholder proposals, elections of directors (even if not contested), executive compensation (including any advisory stockholder votes on executive compensation), and certain corporate governance proposals, even if managementsupported. Accordingly, your broker or nominee may not vote your shares on Proposals 1 and 3 without your instructions, but may vote your shares on Proposal 2 even in the absence of your instructions. Because NYSE rules apply to all brokers that are members of the NYSE, the foregoing rules apply to the Annual Meeting even though our common stock is listed on The Nasdaq Capital Market.

What if I return a proxy card or otherwise vote but do not make specific choices?

If you return a signed and dated proxy card or otherwise vote without marking voting selections, your shares will be voted, as applicable, "For" the election of all five nominees for director and, "For" the proposals to ratify the appointment of Weinberg & Company, P.A. as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2024, and to approve the compensation of the Company's named executive officers. If any other matter is properly presented at the meeting, your proxyholder (one of the individuals named on your proxy card) will vote your shares using his or her best judgment.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these proxy materials, our directors and employees may also solicit proxies in person, by telephone, or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. We may also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

What does it mean if I receive more than one Notice?

If you receive more than one Notice, your shares may be registered in more than one name or in different accounts. Please follow the voting instructions on the Notices to ensure that all of your shares are voted.

Can I change my vote after submitting my proxy?

Stockholder of Record: Shares Registered in Your Name

Yes. You can revoke your proxy at any time before the final vote at the meeting. If you are the record holder of your shares, you may revoke your proxy in any one of the following ways:

- You may submit another properly completed proxy card with a later date.
- You may grant a subsequent proxy by telephone or through the internet.
- You may send a timely written notice that you are revoking your proxy to the Company's Secretary at 680 East Colorado Boulevard, Suite 180, Pasadena, California 91101.
- You may vote during the Annual Meeting which will be hosted via the Internet.

Your most current proxy card or telephone or internet proxy is the one that is counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If your shares are held by your broker or bank as a nominee or agent, you should follow the instructions provided by your broker or bank.

8

When are stockholder proposals and director nominations due for next year's Annual Meeting?

Under the Company's Bylaws, your proposal (including a director nomination) must be submitted in writing to Lixte Biotechnology Holdings, Inc., ATTN: Secretary, at 680 East Colorado Boulevard, Suite 180, Pasadena, California 91101, not less than ninety (90) days nor more than one hundred twenty (120) days prior to the one-year anniversary of the preceding year's annual meeting. Accordingly, notice of a proposal must be submitted no earlier than July 31, 2025 and no later than August 29, 2025. You are also advised to review the Company's Bylaws, which contain additional requirements relating to advance notice of stockholder proposals and director nominations.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting, who will separately count, for the proposal to elect directors, votes "For", "Withhold" and broker non-votes; and, with respect to Proposals 2 and 3, votes "For" and "Against", and abstentions.

As discussed above, when a beneficial owner of shares held in "street name" does not give instructions to the broker or nominee holding the shares as to how to vote on matters deemed by the NYSE to be "non-routine", the broker or nominee cannot vote the shares. These unvoted shares are counted as "broker non-votes."

How Many Votes Are Needed for Each Proposal to Pass?

Proposal	Vote Required for Approval	Effect of Abstention	Effect of Broker Non-Vote
Election of five members to our Board of Directors	Plurality of the votes cast (the five directors receiving the most "For" votes)	None.	None.
Ratification of the Appointment of Weinberg & Company, P.A. as our Independent Registered Public Accounting Firm for our Fiscal Year Ending December 31, 2024	"For" votes from the holders of a majority of shares present in person or represented by proxy and entitled to vote on the matter	Against.	Not applicable (1).
To approve, on an advisory basis, the compensation of the Company's named executive officers, as disclosed in the proxy statement	"For" votes from the holders of a majority of shares present in person or represented by proxy and entitled to vote on the matter	Against.	None.

(1) This proposal is considered to be a "routine" matter under NYSE rules. Accordingly, if you hold your shares in street name and do not provide voting instructions to your broker, bank or other agent that holds your shares, your broker, bank or other agent has discretionary authority under NYSE rules to vote your shares on this proposal.

Vote cast online during the virtual Annual Meeting will constitute votes cast in person at the Annual Meeting for purposes of the votes.

What Constitutes a Quorum?

To carry on business at the Annual Meeting, we must have a quorum. A quorum is present when 33-1/3% of the shares entitled to vote, as of the Record Date, are represented in person or by proxy. Virtual attendance at the Annual Meeting constitutes presence in person for purposes of a quorum at the meeting. Thus, holders representing at least 749,764 shares must be represented in person or by proxy to have a quorum. Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you vote at the Annual Meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. Shares owned by us are not considered outstanding or considered to be present at the Annual Meeting. If there is not a quorum at the Annual Meeting, our stockholders may adjourn the meeting.

9

How can I find out the Results of the Voting at the Annual Meeting?

Preliminary voting results will be announced at the Annual Meeting. Final voting results will be published in a Current Report on Form 8-K, which we will file with the SEC within four business days of the annual meeting.

PROPOSAL 1: ELECTION OF DIRECTORS

Each director to be elected at the Annual Meeting will serve until the next annual meeting of stockholders and until his or her successor is elected, or, if sooner, until such director's death, resignation or removal. Unless otherwise instructed, the persons named in the accompanying proxy intend to vote the shares represented by the proxy for the election of the five nominees listed below. Although it is not contemplated that any nominee will decline or be unable to serve as a director, in such event, proxies will be voted by the proxy holder for such other persons as may be designated by the Board of Directors, unless the Board of Directors reduces the number of Directors to be elected. Election of a director to the Board of Directors requires a plurality of the votes cast at the Annual Meeting.

The current Board of Directors consists of Bas van der Baan, Dr. Stephen Forman, Dr. Yun Yen, Regina Brown, and Dr. René Bernards. The Board of Directors has determined that a majority of its members consisting of Dr. Forman, Dr. Bernards, Dr. Yen and Ms. Brown are independent directors within the meaning of the applicable Nasdaq rules.

The following table sets forth the director nominees and certain information about such nominees.

Name	Age	Director Since
Bas van der Baan	52	2022
Dr. Stephen Forman	76	2016
Dr. Yun Yen	69	2018
Regina Brown	61	2021
Dr. René Bernards	71	2022

Bas van der Baan

Bastiaan ("Bas") van der Baan was appointed to the Company's Board of Directors effective June 17, 2022. Effective September 26, 2023, Mr. van der Baan replaced the Company's founder, Dr. John S. Kovach, as President and Chief Executive Officer. Dr. Kovach passed away on October 5, 2023. Effective October 6, 2023, as a result of the passing of Dr. Kovach, Mr. van der Baan was appointed as Chairman of the Board of Directors.

Mr. van der Baan has over 20 years of experience in the biotechnology industry, with a key focus on oncology and diagnostics. He has extensive knowhow in the process of managing a compound from clinical development to reimbursement and commercialization, as well as the establishment of partnerships with the pharmaceutical industry, academic collaborators, distributors, insurance companies and governments to successfully launch new oncology products. Mr. van der Baan was most recently the Chief Clinical Officer of Agendia, an oncology molecular diagnostic company based in Irvine, California and Amsterdam, Netherlands through July 15, 2023. Mr. van der Baan is an independent director of Tethis S.p.A., a Milan, Italy-based developer of a novel platform for liquid biopsy testing. Mr. van der Baan was co-founder of ThromboDx, a liquid biopsy company that was acquired in 2016, Qameleon Therapeutics, a company developing synthetic lethal drug combinations for cancer treatment, and Oncosence, an oncology drug development company using senescence as target for drug development. Mr. van der Baan started his career in 1997 at a specialty chemicals division of Unilever that was acquired by ICI. In 2002, Mr. van der Baan joined Kreatech, a biotechnology company acquired by Leica that specialized in life science reagents for gene expression, DNA and protein analysis. Mr. van der Baan holds a Master's Degree in Molecular Sciences from the Wageningen University in the Netherlands.

Dr. Stephen J. Forman

Stephen J. Forman, M.D. was appointed to our Board of Directors, effective May 13, 2016. Dr. Forman is an internationally recognized expert in hematologic malignancies and bone marrow transplantation and is a leader in preclinical and clinical cancer research. He is co-editor of Thomas' Hematopoietic Cell Transplantation, a definitive textbook for clinicians, scientists and health care professionals. Dr. Forman is the Francis and Kathleen McNamara Distinguished Chair in Hematology and Hematopoietic Cell Transplantation at the City of Hope Comprehensive Cancer Center, a position he has held since 1987.

In nearly 40 years at City of Hope, Dr. Forman has been instrumental in advancing the survival rates for patients suffering from cancers of the blood and immune system such as leukemia, lymphoma and myeloma.

As Director of the T Cell Immunotherapy Research Laboratory, his current research is focused on cancer immunotherapy, using the body's own immune system to attack cancer. Pharmacological enhancement of patients' immune responses to their cancers is of special interest to us as the enzyme target of its lead clinical compound, LB-100, has been reported recently to be critical to immune function. Much of Dr. Forman's current work centers on T cells and their cancer-fighting potential.

We believe that Dr. Forman's qualifications to sit on the Board include his extensive medical and research experience principally at the City of Hope, one of the nation's leading biomedical research and treatment institutions.

Dr. Yun Yen

Yun Yen, M.D., Ph.D., F.A.C.P. was appointed to our Board of Directors effective August 4, 2018. Dr. Yen is a physician, scientist, innovator, and philanthropist. He is widely regarded as an expert in ribonucleotide reductase, a critical target in cancer therapy and diagnostics. He is President Emeritus of Taipei Medical University (TMU) and Chair Professor of the Ph.D. Program for Cancer Biology and Drug Discovery. Prior to TMU, Dr. Yen was the Allen and Lee Chao Endowed Chair in Developmental Cancer Therapeutics, Chair of Molecular Pharmacology Department, Associate Director for Translational Research, and Co-Director of the Developmental Cancer Therapeutics Program at the City of Hope NCI-designated Comprehensive Cancer Center, Duarte California. He has published more than 300 peer-reviewed articles, holds over 60 patents, and has commercialized multiple methodologies involving nanoparticles, small and large molecule drugs, biomarkers, stem cells, and medical devices. Dr. Yen also founded philanthropic organizations aimed at serving the global cancer community and holds membership in numerous professional societies. He serves on the boards of Fulgent Genetics and Tanvex BioPharma Inc.

We believe that Dr. Yen's qualifications to sit on the Board include his extensive medical and research experience.

Regina Brown

Regina Brown was appointed to our Board of Directors effective May 11, 2021. Ms. Brown has been a practicing accountant for over 30 years. Currently, her practice has a wide range of clients, varying in size, industry and geographic locations. They include large national corporations listed on the New York Stock Exchange, as well as local Southern California businesses. Other clients consist of professionals, wholesalers, and high net worth individuals. Many of her clients have international and cross-border operations.

As a consequence of her depth of experience, she regularly assists other professionals with their client's issues and performs tax research and analysis in connection with litigation and other matters including marital dissolution, tax and accounting with respect to mergers and acquisitions, implementation of internal controls, and extensive work in the area of trusts and estates. In addition, international tax matters and compliance have become a significant part of her practice. Ms. Brown is a member in good standing of the California Society of CPAs and the American Institute of Certified Public Accountants and has appeared as a speaker before both organizations.

We believe that Ms. Brown's qualifications to sit on the Board include her extensive accounting and business experience.

11

Dr. René Bernards

Dr. René Bernards was appointed to our Board of Directors effective June 15, 2022. Dr. Bernards is a leader in the field of molecular carcinogenesis and is employed by the Netherlands Cancer Institute in Amsterdam. His research focuses on identifying effective new drug combinations, new drug targets, and mechanisms of resistance to anti-cancer drugs. He has also co-founded four biotechnology companies to bring his scientific discoveries to clinical oncology practice. He is a member of the Royal Netherlands Academy of Sciences, an International Honorary Member of the American Academy of Arts and Sciences and an International Member of the National Academy of Sciences (USA). Additionally, he is a fellow of the American Association for Cancer Research (AACR), and has received the Princess Takamatsu Memorial Lectureship at this year's AACR annual meeting where he presented new data on the unexpected effectiveness of the Company's lead compound, LB-100, when given with a variety of standard and investigational anti-cancer compounds that have only modest activity on their own.

We believe that Dr. Bernards' qualifications to sit on the Board include his extensive medical and research experience.

2020 Stock Incentive Plan

The Board of Directors of the Company has adopted, and the Company's stockholders have approved, the 2020 Stock Incentive Plan (the "2020 Plan"), which provides for the granting of equity-based awards, consisting of stock options, restricted stock, restricted stock units, stock appreciation rights, and other stock-based awards to employees, officers, directors and consultants of the Company and its affiliates for up to 750,000 shares of the Company's common stock, under terms and conditions as determined by the Company's Board of Directors.

Director Compensation

Under our non-employee Director Compensation policy, the following compensation program was amended in June 2022 for the outside (independent) directors:

Cash Compensation (payable quarterly):

Base director compensation - \$20,000 per year Chair of audit committee - additional \$10,000 per year Chair of any other committees - additional \$5,000 per year Member of audit committee - additional \$5,000 per year Member of any other committees - additional \$2,500 per year

In conjunction with the Company's efforts to preserve cash, the Board and the Compensation Committee approved an amendment to the above program, such that for the quarter ended June 30, 2024 and for the subsequent quarters ended September 30, 2024 and December 31, 2024, all of the non-officer directors will receive, in lieu of cash compensation, stock options exercisable for a period of five years, vesting immediately, to purchase common stock at an exercise price based on the closing market price at the end of each of the applicable quarters, with the amount of such stock options equal to the cash payment such director would otherwise have been entitled to receive for such quarter, divided by their quarter-end value as determined pursuant to the Black-Scholes option-pricing model. This program may be extended for additional quarterly periods subsequent to December 31, 2024.

Equity Compensation:

Appointment of new director – Options for 25,000 shares of common stock, exercisable at the closing market price on date of grant for a period of five years, vesting 50% on the grant date and the remainder vesting 12.5% on the last day of each subsequent calendar quarter beginning in the quarter immediately subsequent to the date of grant until fully vested, subject to continued service. At the discretion of the Board, for a nominee to the Board who is restricted by his or her respective institution or employer from receiving equity-based compensation, in lieu of the grant of such stock options, the Company may elect to pay a one-time cash fee to \$100,000 to such director, payable upfront.

Annual grant of stock options to outside directors – effective on the last business day of the month of June, options to purchase 10,000 shares of common stock, exercisable for a period of five years, at the closing market price on the date of the grant, vesting 12.5% on the last day of each subsequent calendar quarter-end beginning in the quarter immediately subsequent to the date of grant until fully vested. If any director has served for less than 12 full calendar months at the grant date, the amount of such stock option grant shall be prorated based on the length of service of such director. At the discretion of the Board, for a nominee who is restricted by his or her respective institution or employer from receiving equity compensation, in lieu of the grant of such stock options, the Company may elect to pay an annual cash fee of \$40,000 to such director payable quarterly.

12

Effective as of June 15, 2022, Dr. René Bernards was appointed to the Company's Board of Directors. As a new director, in lieu of a grant of stock options, Dr. Bernards received a one-time cash board fee of \$100,000, payable immediately, and an annual cash board fee of \$40,000, payable quarterly. During the year ended December 31, 2022, the Company recorded charges to general and administrative costs in the consolidated statement of operations of \$133,873 with respect to his cash board compensation. In conjunction with the Company's efforts to preserve cash, Dr. Bernards has agreed to receive equity-based compensation for his services on the Board, effective with the quarter ended June 30, 2024. Dr. Bernards has agreed to receive the same Board compensation, both in form and amount, as the other non-officer directors.

On June 17, 2022, the Board of Directors appointed Bas van der Baan to the Board of Directors. In connection with his appointment to the Board of Directors, and in accordance with the Company's cash and equity compensation package for members of the Board of Directors, Mr. van der Baan was granted stock options to purchase 25,000 shares of common stock, exercisable for a period of five years at an exercise price of \$7.40 per share (the closing market price on the grant date), vesting 50% on the grant date and the remainder vesting 12.5% on the last day of each subsequent calendar quarter-end until fully vested, subject to continued service. The fair value of these stock options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be \$158,525 (\$6.341 per share), of which \$79,263 was attributable to the portion of the stock options fully vested on June 17, 2022 and was therefore charged to operations on that date. The remaining unvested portion of the fair value of the stock options is being charged to operations ratably from June 17, 2022 through June 30, 2024. During the year ended December 31, 2022, the Company recorded a total charge to general and administrative costs in the consolidated statement of operations of \$100,249 with respect to these stock options. In conjunction with his Employment Agreement with the Company, effective September 26, 2023, Mr. van der Baan was granted options to purchase 250,000 shares of common stock exercisable for a period of five years at an exercise price of \$1.95 per share, vesting quarterly over a three-year period on the last day of each calendar quarter commencing October 1, 2023, subject to continued service.

On June 30, 2022, in accordance with the Company's cash and equity compensation package for members of the Board of Directors, each of the five non-officer directors of the Company was granted stock options to purchase 10,000 shares (a total of 50,000 shares) of common stock, exercisable for a period of five years at an exercise price of \$7.40 per share (the closing market price on the grant date), vesting 12.5% on the last day of each subsequent calendar quarter-end until fully vested, subject to continued service. The fair value of these stock options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be \$316,700 (\$6.334 per share), which is being charged to operations ratably from July 1, 2022 through June 30, 2024. During the year ended December 31, 2022, the Company recorded a total charge to general and administrative costs in the consolidated statement of operations of \$63,777 with respect to these stock options.

On November 6, 2022, each of the four officers of the Company was granted stock options to purchase 20,000 shares (a total of 80,000 shares) of common stock, exercisable for a period of five years at an exercise price of \$20.00 per share, vesting 25% on issuance and 25% on each anniversary date thereafter until fully vested, subject to continued service. The total fair value of these stock options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be \$262,560 (\$3.282 per share), which is being charged to operations ratably from November 6, 2022 through November 6, 2025. During the year ended December 31, 2022, the Company recorded a total charge to general and administrative costs in the consolidated statement of operations of \$75,520 with respect to these stock options.

On June 30, 2023, in accordance with the Company's cash and equity compensation package for members of the Board of Directors, each of the four non-officer directors of the Company was granted stock options to purchase 10,000 shares (a total of 40,000 shares) of the Company's common stock, exercisable for a period of five years at an exercise price of \$5.88 per share (the closing market price on the grant date), vesting 12.5% on the last day of each subsequent calendar quarter -end until fully vested, subject to continued service. The fair value of these stock options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be \$192,593 (\$4.8131 per share), which is being charged to operations ratably from July 1, 2023 through June 30, 2025.

13

Summary Compensation Table

The table set forth below presents the compensation awarded to, earned by or paid to our named directors for the years ended December 31, 2023, 2022 and 2021.

Name and Principal Position (2)	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)(1)	Non-Equity Incentive Plan Compensation (\$)	Non-Qualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
Philip F. Palmedo	2023	-	-	-	-	-	-	-	-
Director (8)	2022	-	-	-	63,340	-	-	21,148	84,488
	2021	-	-	-	427,047	-	-	20,458	447,505
Stephen J. Forman (9)	2023	-	-	-	48,131	-	-	22,500	70,631
Director	2022	-	-	-	63,340	-	-	22,500	85,840
	2021	-	-	-	427,047	-	-	16,819	443,866
Winson Sze Chun Ho	2023	-	-	-	-	-	-	-	-
Director (3)	2022	-	-	-	-	-	-	-	-
	2021	-	-	-	142,828	-	-	-	142,828
Yun Yen (10)	2023	-	-	-	48,131	-	-	30,000	78,131
Director	2022	-	-	-	63,340	-	-	30,000	93,340
	2021	-	-	-	427,047	-	-	21,833	448,880
					,			,	,

Gil Schwartzberg	2023	-	-	-	-	-	-	-	-
Director (4)	2022	-	-	-	63,340	-	-	16,630	79,970
	2021	_	_	_	1,037,830	_	_	14,556	1,052,386
	2021				1,057,050			11,550	1,052,500
Regina Brown	2023	-	_	-	48,131	-	_	30,000	78,131
					· · · · · · · · · · · · · · · · · · ·			,	
Director (5)	2022	-	-	-	63,340	-	-	30,000	93,340
	2021	-	-	-	942,582	-	-	19,167	961,749
René Bernards	2023	-	-	-	-	-	-	62,500	62,500
Director (6)	2022	-	-	-	-	-	-	133,873	133,873
	2021	-	-	-	-	-	-	-	-
Bas van der Baan	2023	-	-	-	48,131	-	-	18,478	66,609
Director (7)	2022	-	-	-	158,525	-	-	11,869	170,394
	2021	-	-	-	- -	-	-	-	-

(1) Consists of grant date fair value of option award calculated pursuant to the Black-Scholes option-pricing model.

(2) Dr. John S. Kovach, the founder of the Company, served as Chairman of the Board of Directors until his death on October 5, 2023. Prior to September 26, 2023, Dr. Kovach was also the President, Chief Executive Officer and Chief Scientific Officer of the Company. Dr. Kovach did not receive any separate compensation for his services as a member of the Board of Directors.

(3) Resigned as a director of the Company effective April 9, 2021.

(4) Appointed as a director of the Company effective April 9, 2021 and died on October 30, 2022.

(5) Appointed as a director of the Company effective May 11, 2021.

(6) Appointed as a director of the Company effective June 15, 2022. Dr. Bernards received all of his compensation in 2022 and 2023 in the form of cash.

(7) Appointed as a director of the Company effective June 17, 2022, and as Chairman of the Board of Directors on October 6, 2023.

(8) Did not stand for re-election at the annual meeting of stockholders. Accordingly, his term as a director of the Company ended effective October 7, 2022.

(9) Appointed as a director of the Company effective May 13, 2016.

(10) Appointed as a director of the Company effective August 4, 2018.

14

Family Relationships

Eric Forman, our appointed Vice President and Chief Operating Officer, is the son of board member Dr. Stephen Forman. Julie Forman, Mr. Forman's spouse, is Vice President of Morgan Stanley Wealth Management, where the Company's cash is deposited and with which the Company maintains a continuing banking relationship.

Involvement in Certain Legal Proceedings

During the past ten years, none of our officers, directors, promoters or control persons have been involved in any legal proceedings as described in Item 401(f) of Regulation S-K.

VOTE REQUIRED

Under applicable Delaware law, the election of each nominee requires the affirmative vote by a plurality of the voting power of the shares present and entitled to vote on the election of directors at the Annual Meeting at which a quorum is present.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR THE ELECTION OF THE NOMINEES NAMED ABOVE AS DIRECTORS, AND PROXIES SOLICITED BY THE BOARD OF DIRECTORS WILL BE VOTED IN FAVOR THEREOF UNLESS A STOCKHOLDER HAS INDICATED OTHERWISE ON THE PROXY.

INFORMATION REGARDING THE BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

Code of Business Conduct and Ethics

The Board has established a corporate Code of Business Conduct and Ethics that applies to all officers, directors and employees and which is intended to qualify as a "code of ethics" as defined by Item 406 of Regulation S-K of the Exchange Act. The Code of Business Conduct and Ethics is available on the Investor Relations section of the Company's website at <u>www.lixte.com</u>. If the Company makes any substantive amendments to the Code of Business Conduct and Ethics or grants any waiver from a provision of the Code to any executive officer or director, the Company will promptly disclose the nature of the amendment or waiver on its website.

Public Availability of Corporate Governance Documents

Our key corporate governance documents, including our Code of Conduct and the charters of our Audit Committee and Compensation Committee are:

available on the Investor Relations section of our corporate website at<u>www.lixte.com</u>; and

• available in print to any stockholder who requests them from our corporate secretary.

Director Attendance

The Board held seven meetings during 2023. Each director attended at least 75% of Board meetings and meetings of the committees on which he or she served.

Board Qualification and Selection Process

Our entire Board of Directors serves in place of a Nominating and Corporate Governance Committee. The Board does not have a specific written policy or process regarding the nominations of directors, nor does it maintain minimum standards for director nominees or consider diversity in identifying nominees for director. However, the Board does consider the knowledge, experience, integrity and judgment of potential candidates for nominations to the Board. The Board will consider persons recommended by stockholders for nomination for election as directors. The Board will consider and evaluate a director candidate recommended by a stockholder in the same manner as a Board-recommended nominee. Stockholders wishing to recommend director candidates must follow the prior notice requirements as described herein.

15

Board Diversity Matrix

The following Board Diversity Matrix as of September 30, 2024 presents our Board Diversity statistics, in accordance with NASDAQ Rule 5606, as self-disclosed by the directors. While the Board satisfies minimum objectives of NASDAQ Rule 5605(f)(2), the Board will continue to consider the diversity of the Board in its selection of director nominees.

Total Number of Directors: 5		
	Female	Male
Gender:		
Directors	1	4
Number of Directors Who Identify in Any of the Categories Below:		
Asian	0	1
White	1	3

Board Leadership Structure and Risk Oversight

The leadership of the Board is currently structured so that it is led by the Company's Chief Executive Officer, Bas van der Baan, who is responsible for presiding over meetings of the Board of Directors, setting meeting agendas and determining materials to be distributed to the Board of Directors.

The Board of Directors has determined that given the size and current state of the Company's operations, this leadership structure is in the best interest of the Company and its stockholders. The entire Board of Directors, as well as through its various committees, is responsible for oversight of the Company's risk management process. Management furnishes information regarding risk to the Board of Directors as requested. The Audit Committee discusses risk management with the Company's management and independent public accountants as set forth in the Audit Committee's charter. The Compensation Committee reviews the compensation programs of the Company to make sure economic incentives are tied to the long-term interests of the stockholders. The Company believes that innovation and the building of long-term stockholder value are impossible without taking risks. The Company recognizes that imprudent acceptance of risk and the failure to identify risks could be detrimental to stockholder value. The company may face.

Board Committees

The Board has established an Audit Committee and a Compensation Committee. For the fiscal year ended December 31, 2023, Regina Brown, Bas van der Baan, and Yun Yen served on the Audit Committee, with Ms. Brown serving as Chair. As Mr. van der Baan was appointed as the Company's President and Chief Executive Officer, effective September 26, 2023, René Bernards replaced Mr. van der Baan on the Audit Committee. For the fiscal year ended December 31, 2023, René Bernards, Stephen Forman and Yun Yen served on the Compensation Committee, with Dr. Yen serving as Chair. Effective March 12, 2024, Regina Brown replaced Dr. Forman on the Compensation Committee.

The following is a description of each of the committees and their composition:

Audit Committee

Audit Committee

Our Audit Committee is responsible for, among other things:

- Approving and retaining the independent auditors to conduct the annual audit of our financial statements;
- reviewing the proposed scope and results of the audit;
- reviewing and pre-approving audit and non-audit fees and services;
- reviewing accounting and financial controls with the independent auditors and our financial and accounting staff;
- reviewing and approving transactions between us and our directors, officers and affiliates;
- establishing procedures for complaints received by us regarding accounting matters;
- overseeing internal audit functions, if any; and
- preparing the report of the Audit Committee that the rules of the SEC require to be included in our annual meeting proxy statement.

Our Audit Committee currently consists of René Bernards, Dr. Yun Yen, and Regina Brown, with Ms. Brown serving as chair. Our Board of Directors has affirmatively determined that each of the Audit Committee members meet the definition of "independent director" under the Nasdaq rules, and that they meet the independence standards under Rule 10A-3. Each member of our Audit Committee meets the financial literacy requirements of the Nasdaq rules. In addition, our Board of Directors has determined that Regina Brown qualifies as an "audit committee financial expert", as such term is defined in Item 407(d)(5) of Regulation S-K. Our Board of Directors has adopted a written charter for the Audit Committee, which is available on our principal corporate website at <u>www.lixte.com</u>. The Audit Committee met six times during 2023.

Report of the Audit Committee of the Board of Directors

This report of the Audit Committee is required by the SEC and, in accordance with the SEC's rules, will not be deemed to be part of or incorporated by reference by any general statement incorporating by reference this proxy statement into any filing under the Securities Act of 1933, as amended (the "Securities Act"), or under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), except to the extent that we specifically incorporate this information by reference, and will not otherwise be deemed

The Audit Committee has reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2023 with management of the Company. The Audit Committee has discussed with the Company's independent registered public accounting firm the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board ("PCAOB") and the SEC. The Audit Committee has also received the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the PCAOB regarding the independent accountants' communications with the Audit Committee concerning independence, and has discussed with the independent registered public accounting firm the accounting firm's independence. Based on the foregoing, the Audit Committee has recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Submitted by:

The Audit Committee of The Board of Directors

Regina Brown (Chair) Dr. René Bernards Dr. Yun Yen

Compensation Committee

Our Compensation Committee is responsible for, among other things:

- reviewing and recommending the compensation arrangements for executive management;
- establishing and reviewing general compensation policies with the objective to attract and retain superior talent, to reward individual performance and to achieve our financial goals;
- administering our stock incentive plans; and
- preparing the report of the Compensation Committee that the rules of the SEC require to be included in our annual meeting proxy statement.

Our Compensation Committee consists of Dr. Yun Yen, Regina Brown and René Bernards, with Dr. Yen serving as chair. Our Board of Directors has determined that all three committee members are independent directors under Nasdaq rules. Our Board of Directors has adopted a written charter for the Compensation Committee, which is available on our principal corporate website at <u>www.lixte.com</u>. The Compensation Committee met one time during 2023.

Compensation Committee Interlocks and Insider Participation

None of the members of the Compensation Committee is an officer or employee of the Company. None of the executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on the Board or Compensation Committee.

Compensation Committee Report

This report of the Compensation Committee is required by the SEC and, in accordance with the SEC's rules, will not be deemed to be part of or incorporated by reference by any general statement incorporating by reference this proxy statement into any filing under the Securities Act or under the Exchange Act, except to the extent that we specifically incorporate this information by reference, and will not otherwise be deemed "soliciting material" or "filed" under either the Securities Act or the Exchange Act.

18

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis contained in this proxy statement with management. Based on this review and discussion, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be incorporated into the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Submitted by:

The Compensation Committee of The Board of Directors

Dr. Yun Yen (Chair) Regina Brown Dr. René Bernards

Stockholder Communication

Any stockholder may communicate in writing by mail at any time with the entire Board of Directors or any individual director (addressed to "Board of Directors" or to a named director), c/o Lixte Biotechnology Holdings, Inc., ATTN: Secretary, 680 East Colorado Boulevard, Suite 180, Pasadena, California 91101. All communications will be compiled by the Secretary of the Company and promptly submitted to the Board of Directors or the individual directors on a periodic basis.

Policy Regarding Attendance at Annual Meetings of Stockholders

The Company does not have a policy with regard to the attendance of Board members at annual meetings of stockholders.

Director Independence

As required under the Nasdaq Stock Market listing standards, a majority of the members of a listed company's board of directors must qualify as "independent", as affirmatively determined by the Board of Directors. The Board of Directors consults with the Company's counsel to ensure that its determinations are consistent with relevant securities and other laws and regulations regarding the definition of "independent", including those set forth in pertinent listing standards of Nasdaq, as in effect from time to time.

Consistent with these considerations, after review of all relevant identified transactions or relationships between each director, or any of his or her family members, and the Company, its senior management and its independent auditors, the Board of Directors has affirmatively determined that the following director nominees are independent directors within the meaning of the applicable Nasdaq listing standards: Yun Yen, Regina Brown, and René Bernards.

PROPOSAL 2: RATIFICATION OF THE APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee has appointed Weinberg & Company, P.A. ("Weinberg") to serve as our independent registered public accounting firm for the fiscal year ending December 31, 2024 and our Board of Directors has further directed that management submit the selection of its independent registered public accountant firm for ratification by the stockholders at the Annual Meeting. Weinberg has audited the Company's financial statements since 2013. Representatives of Weinberg are not expected to be present at the Annual Meeting.

Stockholder ratification of the selection of Weinberg as the Company's independent registered public accountants is not required by Delaware law, the Company's certificate of incorporation, or the Company's bylaws. However, the Audit Committee is submitting the selection of Weinberg to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee will reconsider whether to retain that firm. Even if the selection is ratified, the Audit Committee in its discretion may direct the appointment of different independent registered public accountants at any time during the year if the Audit Committee determines that such a change would be in the best interests of the Company and its stockholders.

19

The affirmative vote of the holders of a majority of the shares present in person or represented by proxy and entitled to vote at the annual meeting will be required to ratify the selection of Weinberg. Abstentions will be counted toward the tabulation of votes cast on Proposal 2 and will have the same effect as negative votes. Broker non-votes will be counted towards a quorum, but will not be counted for any purpose in determining whether Proposal 2 has been approved.

Audit Fees

The following table sets forth aggregate fees billed to us by Weinberg & Company, P.A., our independent registered public accounting firm during the fiscal years ended December 31, 2023 and 2022.

	Years Ended December 31,			
	2023		2022	
Audit Fees ⁽¹⁾	\$ 120,640	\$	111,806	
Audit-Related Fees ⁽²⁾	_		_	
Tax Fees ⁽³⁾	32,860		28,553	
Other Fees ⁽⁴⁾	_		_	
Total	\$ 153,500	\$	140,359	

(1) Audit fees represent fees for professional services provided in connection with the audit of our annual financial statements included in our Annual Reports on Form 10-K and the review of our interim financial statements included in our Quarterly Reports on Form 10-Q and services that are normally provided in connection with statutory or regulatory filings, excluding those fees included in Other Fees.

- (2) Audit-related fees represent fees for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and not reported above under "Audit Fees". There were no such fees incurred during the years ended December 31, 2023 and 2022.
- (3) Tax fees represent fees for professional services related to tax compliance, tax advice and tax planning.
- (4) Other fees represent fees incurred with respect to our Registration Statements on Forms S-3 and S-8 declared effective by the U.S. Securities and Exchange Commission. There were no such fees incurred during the years ended December 31, 2023 and 2022.

All audit and audit-related services, tax services and other services rendered by Weinberg & Company, P.A. during the fiscal years ended December 31, 2023 and 2022 were pre-approved by our Board of Directors. The Board of Directors has adopted a pre-approval policy that provides for the pre-approval of all services performed for us by our independent registered public accounting firm.

Policy for Pre-Approval of Independent Auditor Services

The Audit Committee's policy is to pre-approve all audit and permissible non-audit services provided by Weinberg. These services may include audit services, audit-related services, tax services and other services. Pre-approval is generally provided for up to one year and any pre-approval is detailed as to the specific service or category of service and is generally subject to a specific budget. The independent auditor and management are required to periodically communicate to the Audit Committee regarding the extent of services provided by the independent auditor in accordance with this pre-approval, and the fees for the services performed to date. The Audit Committee may also pre-approve particular services on a case-by-case basis.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR THE RATIFICATION OF THE APPOINTMENT OF WEINBERG & COMPANY, P.A. AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM, AND PROXIES SOLICITED BY THE BOARD OF DIRECTORS WILL BE VOTED IN FAVOR THEREOF UNLESS A STOCKHOLDER HAS INDICATED OTHERWISE ON THE PROXY.

20

PROPOSAL 3:

APPROVAL, ON ADVISORY BASIS, OF COMPENSATION OF THE COMPANY'S NAMED EXECUTIVE OFFICERS

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and Section 14A of the Exchange Act entitle the Company's stockholders to vote to approve, on an advisory basis, the compensation of the Company's named executive officers as disclosed in this Proxy Statement (including the compensation tables) pursuant to the SEC's rules. This Annual meeting will be the first opportunity for our stockholders to indicate their preference as to when the Company should solicit a non-binding advisory vote on the compensation of the named executive officers, commonly referred to as a "say-on-pay vote," every three years. The Board of Directors has adopted a policy that solicitation of the "say-on-pay" vote should be every three years. In accordance with that policy, this year, the Company is asking the stockholders to approve, on an advisory basis, the compensation of the Company's named executive officers as disclosed in this Proxy Statement in accordance with SEC rules.

The Company's executive compensation programs are designed to (1) motivate and retain executive officers, and (2) align executive officers' interests with those of the

Company's stockholders. Please read the section herein entitled "Executive Compensation" for additional details about the Company's executive compensation programs, including information about the fiscal year 2023 compensation of the Company's named executive officers.

The Compensation Committee continually reviews the compensation programs for the Company's executive officers to ensure they achieve the desired goals of aligning the Company's executive compensation structure with the Company's stockholders' interests and current market practices.

The Company is asking its stockholders to indicate their support for the Company's named executive officer compensation as disclosed in this Proxy Statement. This proposal, commonly known as a "say-on-pay" proposal, gives the Company's stockholders the opportunity to express their views on the Company's executive compensation. This vote is not intended to address any specific item of compensation, but rather the overall compensation of the Company's named executive officers described in this Proxy Statement. Accordingly, the Company will ask its stockholders to vote "FOR" the following resolution at the Annual Meeting:

"RESOLVED, that the compensation paid to Lixte Biotechnology Holdings, Inc.'s named executive officers, as disclosed in the Company's Proxy Statement for the 2024 Annual Meeting of Stockholders pursuant to Item 402 of Regulation S-K, including the Compensation Discussion and Analysis, compensation tables and narrative discussion, is hereby APPROVED."

The say-on-pay vote is advisory, and therefore not binding on the Company, the Compensation Committee or the Company's Board of Directors. The Company's Board of Directors and Compensation Committee value the opinions of the Company's stockholders and to the extent there is any significant vote against the named executive officer compensation as disclosed in this Proxy Statement, the Company will consider its concerns and the Compensation Committee will evaluate whether any actions are necessary to address those concerns. Unless the Board of Directors decides to modify its policy regarding the frequency of soliciting advisory votes on the compensation of the Company's named executives, and depending on the results of the vote for Proposal 4 at the Annual Meeting the next scheduled say-on-pay vote will be at the 2027 Annual Meeting of Stockholders.

THE BOARD RECOMMENDS THAT STOCKHOLDERS VOTE FOR THE APPROVAL OF THE COMPENSATION OF THE COMPANY'S NAMED EXECUTIVE OFFICERS, AS STATED IN THE ABOVE NON-BINDING RESOLUTION, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR THEREOF UNLESS A STOCKHOLDER HAS INDICATED OTHERWISE ON THE PROXY.

21

EXECUTIVE OFFICERS

Name	Age	Position
Bastiaan van der Baan	52	President, Chief Executive Officer, and Chairman of the Board of Directors
Dr. Jan H.M. Schellens	68	Chief Medical Officer
Robert N. Weingarten	72	Vice President and Chief Financial Officer
Eric J. Forman	44	Vice President and Chief Operating Officer

Biographies of Executive Officers

Bastiaan van der Baan

Please see the biography of Mr. van der Baan under the "Directors" section.

Dr. Jan H.M. Schellens, M.D., Ph.D.

Dr. Schellens was appointed our Chief Medical Officer, effective August 1, 2024. Dr. Schellens has more than 25 years of clinical experience as a medical oncologist, pharmacologist and clinical pharmacologist, including more than two decades developing and bringing new drugs to market. Co-author of more than 900 publications in peerreviewed scientific journals, Dr. Schellens has held leadership positions at the Netherlands Cancer Institute in Amsterdam and the Dr. Daniel den Hoed Clinic-Erasmus University in Rotterdam. He was professor of clinical pharmacology at Utrecht University in the Netherlands, where he earned his M.D. degree, and he served as a board member and Chief Medical Officer of Byondis B.V. from January 2019 through September 2023. He also earned a Ph.D. degree in Pharmaceutical Sciences from Leiden University in Leiden, Netherlands. Dr. Schellens served for 17 years as a board member of the Dutch Medicines Evaluation Board and for 12 years as a member and chairperson of the Scientific Advisory Board Oncology of the EMA. From 2016 to the present, he has served as a part-time Chief Medical Officer of Modra Pharmaceuticals B.V., an Amsterdam-based company that successfully completed a Phase 2b clinical study of ModraDoc006/r, a boosted oral taxane therapeutic, in contrast to the standard-of-care IV chemotherapy docetaxel, in patients with prostate cancer.

Dr. Schellens plays a leadership role in the planning, implementation and oversight of clinical trials and be responsible for assisting in the development of strategic clinical goals and the implementation and safety monitoring of investigational studies. Dr. Schellens is the primary medical monitor for all clinical investigational studies, and for the oversight of third party CRO monitors. He is responsible for the regulatory strategy and implementation of the strategy and the primary contact for regulators. Dr. Schellens works closely with the Company's Chief Executive Officer on the development of strategic goals needed to ensure the timely implementation of appropriate clinical studies needed for the successful registration of therapeutics products. Dr. Schellens services are principally rendered in the Netherlands.

Robert N. Weingarten

Mr. Weingarten was appointed to serve as our Vice President and Chief Financial Officer effective August 12, 2020. Mr. Weingarten is an experienced business consultant and advisor with a consulting practice focusing on accounting and SEC compliance issues. Mr. Weingarten was familiar with the financial and business operations of the Company, as he had provided accounting and financial consulting services to the Company for a number of years prior to his appointment as Vice President and Chief Financial Officer with respect to the preparation of the Company's consolidated financial statements and certain other financial and compliance matters.

Since 1979, Mr. Weingarten has provided such financial consulting and advisory services, has acted as chief financial officer, and has served on the boards of directors of numerous public companies in various stages of development, operation or reorganization. Mr. Weingarten has experience in a variety of industries, including the pharmaceutical industry.

Mr. Weingarten has been a Director of Guardion Health Sciences, Inc. since June 2015 and Chairman of its Board of Directors since July 2020. Mr. Weingarten also serves on the audit, compensation, and nominating and corporate governance committees of Guardion Health Sciences, Inc. Previously, Mr. Weingarten served as Lead Director on Guardion's Board of Directors from January 2017 to March 2020. Mr. Weingarten received a B.A. in Accounting from the University of Washington in 1974, an M.B.A. in Finance from the University of Southern California in 1975, and is a Certified Public Accountant (inactive) in the State of California.

Mr. Forman has led our business development efforts since 2013. Effective as of October 1, 2020, Mr. Forman was appointed as our Chief Administrative Officer, and effective as of November 6, 2022, Mr. Forman was promoted to Vice President and Chief Operating Officer. In his roles as Chief Administrative Officer and Chief Operating Officer, his responsibilities include overseeing all internal operations, the development of science/business collaborations, and the management of our growing intellectual property portfolio. Prior to his involvement with our company, he served as Counsel and Senior Project Manager at Shore Group Associates managing in-house legal, tax, and regulatory affairs and supervising client relations for financial software and mobile application development teams.

As an attorney, Mr. Forman has represented and advised both technology and biotechnology companies, entrepreneurs, non-profits, and start-ups with a focus on intellectual property, licensing, corporate structure and transactions.

Mr. Forman earned a B.A. degree Cum Laude from Loyola Marymount University and a J.D. from the Benjamin N. Cardozo School of Law. He has an active law license and is a member of the New York State Bar Association.

Family Relationships

Eric Forman, our Vice President and Chief Operating Officer, is the son of board member Dr. Stephen Forman and son-in-law of former board member Gil Schwartzberg, who passed away on October 30, 2022. Julie Forman, the wife of Eric Forman and the daughter of the late Gil Schwartzberg, is Vice President of Morgan Stanley Wealth Management, where the Company's cash is deposited and the Company maintains a continuing banking relationship.

OFFICER COMPENSATION

Summary Compensation Table

The table set forth below presents the compensation awarded to, earned by, or paid to our named executive officers for the years ended December 31, 2023, 2022 and 2021.

23

Non-Equity Non-Oualified Stock Option **Incentive Plan** Deferred All Other Salary Bonus Awards Awards Compensation Compensation Compensation Total (\$) Executive Year (\$) (\$) (\$) (\$)(1) (\$) Earnings (\$) (\$) Bas van der Baan (6) 2023 40,639 403,066 443,705 2022 2021 2023 John S. Kovach (2) 190,860 190,860 2022 250,000 65,640 315,640 2021 250,000 250,000 2023 James S. Miser (3) 175,000 175,000 2022 175,000 65,640 240,640 2021 166,667 166,667 2023 Robert N. Weingarten (4) 175,000 175,000 2022 175,000 65,640 240,640 2021 156,667 156.667 2023 Eric J. Forman (5) 200,000 200.000 178,819 2022 65,640 244,459 156,667 2021 156,667

(1) Consists of grant date fair value of option award calculated pursuant to the Black-Scholes option-pricing model.

(2) John S. Kovach was the President and Chief Executive Officer from inception through September 26, 2023. Effective July 15, 2020, the Company entered into an employment agreement with Dr. Kovach. On November 6, 2022, Dr. Kovach was awarded an option grant for 20,000 shares of common stock, exercisable for a period of five years at \$20.00 per share and valued at \$3.282 per share. The employment agreement with Dr. Kovach terminated upon his death on October 5, 2023.

(3) James S. Miser has been the Chief Medical Officer since August 1, 2020. In connection with his employment agreement, Dr. Miser was awarded an option grant for 8,334 shares of common stock, exercisable for a period of five years at \$71.40 per share and valued at \$68.718 per share. On November 6, 2022, Dr. Miser was awarded an option grant for 20,000 shares of common stock, exercisable for a period of five years at \$20.00 per share and valued at \$3.282 per share. Dr. Miser's employment agreement expired on July 31, 2024.

(4) Robert N. Weingarten has been the Vice President and Chief Financial Officer since August 12, 2020. In connection with his employment agreement, Mr. Weingarten was awarded an option grant for 5,833 shares of common stock, exercisable for a period of five years at \$71.40 per share and valued at \$68.718 per share. On November 6, 2022, Mr. Weingarten was awarded an option grant for 20,000 shares of common stock, exercisable for a period of five years at \$20.00 per share and valued at \$3.282 per share.

(5) Eric J. Forman was the Chief Administrative Officer from July 15, 2020 to November 6, 2020. In connection with his employment agreement, Mr. Forman was awarded an option grant for 5,833 shares of common stock, exercisable for a period of five years at \$71.40 per share and valued at \$68.718 per share. Effective November 6, 2022, Mr. Forman was promoted to Vice President and Chief Operating Officer. On November 6, 2022, Mr. Forman was awarded an option grant for 20,000 shares of common stock, exercisable for a period of five years at \$3.282 per share.

(6) Bas van der Baan has been President and Chief Executive Officer since September 26, 2023. In connection with his employment agreement, Mr. van der Baan was awarded an option grant for 250,000 shares of common stock exercisable for a period of five years at \$1.95 per share and valued at \$1.612 per share.

There were no option exercises by officers during the years ended December 31, 2023, 2022 or 2021.

24

Outstanding Equity Awards at December 31, 2023

The table set forth below presents information regarding outstanding stock options held by our named executive officers as of December 31, 2023.

NAME	GRANT DATE	VESTING COMMENCEMENT DATE	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS EXERCISABLE (#)	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS UNEXERCISABLE (#)	OPTION EXERCISE PRICE (\$)	OPTION EXPIRATION DATE
Bas van der Baan	September 26, 2023	December 31, 2023	20,833	229,167	1.95	September 26, 2028
Dr. John S. Kovach	November 6, 2022	November 6, 2022	5,000	-	20.00	October 5, 2024
Dr. James S. Miser	August 1, 2020 November 6, 2022	August 1, 2020 November 6, 2022	8,334 10,000	- 10,000	71.40 20.00	August 1, 2025 November 6, 2027
Robert N. Weingarten	August 12, 2020 November 6, 2022	August 12, 2020 November 6, 2022	5,833 10,000	- 10,000	71.40 20.00	August 12, 2025 November 6, 2027
Eric J. Forman	May 22, 2019 August 12, 2020 November 6, 2022	May 22, 2019 August 12, 2020 November 6, 2022	1,667 5,833 10,000	- 10,000	66.00 71.40 20.00	May 22, 2024 August 12, 2025 November 6, 2027

Based on a fair market value of \$2.35 per share on December 31, 2023, the intrinsic value attributed to exercisable but unexercised common stock options held by our named executive officers was approximately \$8,000 at December 31, 2023.

Employment Agreements; Compensation

Eric Forman. On July 15, 2020, as amended on August 12, 2020, the Company entered into an employment agreement with Eric Forman, to act as the Company's Chief Administrative Officer reporting directly to the Company's Chief Executive Officer, with an annual salary of \$120,000, payable monthly. Effective May 1, 2021, Mr. Forman's annual salary was increased to \$175,000. Effective November 6, 2022, Mr. Forman was promoted to Vice President and Chief Operating Officer, with an annual salary of \$200,000. Mr. Forman's primary function is to oversee the Company's internal operations, including IT, licensing, legal, personnel, marketing, and corporate governance. Mr. Forman was also granted stock options to acquire 350,000 shares of the Company's common stock. The effective date of the employment agreement was October 1, 2020 and remains in effect until the earlier of (i) one year from the effective date, automatically renewable for additional one-year periods unless terminated by either party upon 60 days written notice prior to the end of the applicable one-year period, (ii) his death, or (iii) termination for cause.

2	5
4	-

Dr. Jan H.M. Schellens, M.D., Ph.D. On May 31, 2024, the Company entered into a Consulting Agreement (the "Schellens Agreement") with Dr. Jan H.M. Schellens, M.D., Ph.D. Pursuant to the Schellens Agreement, effective July 1, 2024, the Company engaged Dr. Schellens as a consultant, and, effective August 1, 2024, as the Company's Chief Medical Officer. The term of the Schellens Agreement will be in effect from July 1, 2024 until the earliest of (i) termination by either party upon sixty days' notice, (ii) Dr. Schellens' death or disability, or (iii) termination by the Company for breach as provided in the Schellens Agreement. Under the Schellens Agreement, Dr. Schellens will provide his services for two days per week with the specific days in each week to be based on arrangements agreed to from time to time between Dr. Schellens and the Company's Chief Executive Officer. The Company will pay Dr. Schellens 104,000 Euros on an annual basis. The Company also has granted Dr. Schellens stock Market on July 1, 2024. The options are for a term of five years, vesting quarterly over a three-year period commencing on the last day of each calendar quarter commencing September 30, 2024.

Robert N. Weingarten. On August 12, 2020, the Company entered into an employment agreement with Robert N. Weingarten pursuant to which Mr. Weingarten was appointed as the Company's Vice-President and Chief Financial Officer, with an annual salary of \$120,000. Effective May 1, 2021, Mr. Weingarten's annual salary was increased to \$175,000. Mr. Weingarten was also granted stock options to acquire 350,000 shares of the Company's common stock. The effective date of the agreement was August 12, 2020 and remains in effect until the earlier of (i) one year from the effective date, automatically renewable for additional one-year periods unless terminated by either party upon 60 days written notice prior to the end of the applicable one-year period, (ii) his death, or (iii) termination for cause.

Bas van der Baan. Effective September 26, 2023, the Company entered into an employment agreement with Bas van der Baan to act as the Company's President and Chief Executive Officer and as Vice Chairman of the Board of Directors, with an annual salary of \$150,000. Effective October 6, 2023, Mr. van der Baan was appointed as Chairman of the Board of Directors upon the death of Dr. Kovach on October 5, 2023. Mr. van der Baan's annual salary may be increased from time to time at the sole discretion of the Board of Directors. In addition, Mr. van der Baan will be eligible to receive an annual bonus as determined at the sole discretion of the Board of Directors. Mr. van der Baan was also granted stock options to acquire 250,000 shares of the Company's common stock. The term of the employment agreement is for three years and is automatically renewable for additional one-year periods unless terminated by either party, subject to early termination provisions as described in the employment agreement.

Officers. The Company has no specific policy or program with respect to the discretionary grant of options to its officers. The Company granted options to its officers concurrent with their respective appointments during the year ended December 31, 2020. The Company also granted discretionary stock options to its officers during the year ended December 31, 2022. It is the Company's policy that any such option grants take into account the existence of material non-public information when determining the timing of such a grant and the specific terms of such award.

Compensation Clawback Policy

The Board of Directors believes that it is in the best interests of the Company and its stockholders to create and maintain a culture that emphasizes integrity and accountability and that reinforces the Company's pay-for-performance compensation philosophy. The Board of Directors has therefore adopted a compensation recoupment policy, which provides for the recovery of erroneously awarded incentive compensation from the Company's executive officers in the event of a triggering event, and which has been filed as an exhibit to this report and has been posted to the investor information/governance section of the Company's corporate website (www.lixte.com).

2020 Stock Incentive Plan

On July 14, 2020, the Board of Directors of the Company adopted the 2020 Stock Incentive Plan (the "2020 Plan"), which was subsequently approved by the stockholders of the Company. The 2020 Plan provides for the granting of equity-based awards, consisting of stock options, restricted stock, restricted stock units, stock appreciation rights, and other stock-based awards to employees, officers, directors and consultants of the Company and its affiliates, initially for a total of 233,333 shares of the Company's common stock, under terms and conditions as determined by the Company's Board of Directors. On October 7, 2022, the stockholders of the Company approved an amendment to the 2020 Plan to increase the number of common shares issuable thereunder by 180,000 shares, to a total of 413,333 shares. On November 27, 2023, the stockholders of the Company approved an amendment to the 2020 Plan to increase the number of common shares issuable thereunder by 336,667 shares, to a total of 750,000 shares.

As of December 31, 2023, unexpired stock options for 495,000 shares were issued and outstanding under the 2020 Plan and 255,000 shares were available for issuance under the 2020 Plan.

Having an adequate number of shares available for future equity compensation grants is necessary to promote our long-term success and the creation of stockholder value by:

- Enabling us to continue to attract and retain the services of key service providers who would be eligible to receive grants;
- Aligning participants' interests with stockholders' interests through incentives that are based upon the performance of our common stock;
- Motivating participants, through equity incentive awards, to achieve long-term growth in our business, in addition to short-term financial performance; and
- Providing a long-term equity incentive program that is competitive as compared to other companies with whom we compete for talent.

The 2020 Plan permits the discretionary award of incentive stock options ("ISOs"), non-statutory stock options ("NQSOs"), restricted stock, restricted stock units ("RSUs"), stock appreciation rights ("SARs"), other equity awards and/or cash awards to selected participants. The 2020 Plan will remain in effect until July 14, 2030.

The 2020 Plan provides for the reservation of 750,000 shares of common stock for issuance thereunder (the "Share Limit"), and provides that the maximum number of shares that may be issued pursuant to the exercise of ISOs is 750,000 shares (the "ISO Limit").

Key Features of the 2020 Plan

Certain key features of the 2020 Plan are summarized as follows:

- If not terminated earlier by our Board of Directors, the 2020 Plan will terminate on July 14, 2030.
- Up to a maximum aggregate of 750,000 shares of common stock may be issued under the 2020 Plan. The maximum number of shares that may be issued pursuant to the exercise of ISOs is also 750,000.
- The 2020 Plan is administered by the Compensation Committee, which is comprised solely of independent members of our Board of Directors. The Board of Directors may designate a separate committee to make awards to employees who are not officers subject to the reporting requirements of Section 16 of the Exchange Act.
- Employees, consultants and board members are eligible to receive awards, provided that the Compensation Committee has the discretion to determine (i) who shall receive any awards, and (ii) the terms and conditions of such awards.
- Awards may consist of ISOs, NQSOs, restricted stock, RSUs, SARs, other equity awards and/or cash awards.
- Stock options and SARs may not be granted at a per share exercise price below the fair market value of a share of our common stock on the date of grant.
- Stock options and SARs may not be repriced or exchanged without stockholder approval.
- The maximum exercisable term of stock options and SARs may not exceed ten years.
- Awards are subject to recoupment of compensation policies adopted by us.

27

Eligibility to Receive Awards. Employees, consultants and members of our Board of Directors are eligible to receive awards under the 2020 Plan. The Compensation Committee determines, in its discretion, the selected participants who will be granted awards under the 2020 Plan.

Shares Subject to the 2020 Plan. The maximum number of shares of common stock that can be issued under the 2020 Plan is 750,000 shares.

The shares underlying forfeited or terminated awards (without payment of consideration), or unexercised awards become available again for issuance under the 2020 Plan. No fractional shares may be issued under the 2020 Plan. No shares will be issued with respect to a participant's award unless applicable tax withholding obligations have been satisfied by the participant.

Administration of the 2020 Plan. The 2020 Plan is administered by the Compensation Committee of the Board of Directors, which consists of independent board members. With respect to certain awards issued under the 2020 Plan, the members of the Compensation Committee also must be "Non-Employee Directors" under Rule 16b-3 of the Exchange Act. Subject to the terms of the 2020 Plan, the Compensation Committee has the sole discretion, among other things, to:

- Select the individuals who will receive awards;
- Determine the terms and conditions of awards (for example, performance conditions, if any, and vesting schedule);
- Correct any defect, supply any omission, or reconcile any inconsistency in the 2020 Plan or any award agreement;
- Accelerate the vesting, extend the post-termination exercise term or waive restrictions of any awards at any time and under such terms and conditions as it deems
 appropriate, subject to the limitations set forth in the 2020 Plan;
- Permit a participant to defer compensation to be provided by an award; and
- Interpret the provisions of the 2020 Plan and outstanding awards.

The Compensation Committee may suspend vesting, settlement, or exercise of awards pending a determination of whether a selected participant's service should be terminated for cause (in which case outstanding awards would be forfeited). Awards may be subject to any policy that the Board of Directors may implement on the recoupment of compensation (referred to as a "compensation clawback" policy). The members of the Board of Directors, the Compensation Committee and their delegates shall be indemnified by us to the maximum extent permitted by applicable law for actions taken or not taken regarding the 2020 Plan.

Types of Awards.

Stock Options. A stock option is the right to acquire shares at a fixed exercise price over a fixed period of time. The Compensation Committee determines, among other terms and conditions, the number of shares covered by each stock option and the exercise price of the shares subject to each stock option, but such per share exercise price cannot be

less than the fair market value of a share of our common stock on the date of grant of the stock option. The exercise price of each stock option granted under the 2020 Plan must be paid in full at the time of exercise, either with cash, or through a broker-assisted "cashless" exercise and sale program, or net exercise, or through another method approved by the Compensation Committee. Stock options granted under the 2020 Plan may be either ISOs or NQSOs. In order to comply with Treasury Regulation Section 1.422-2(b), the 2020 Plan provides that no more than 4,133,333 shares may be issued pursuant to the exercise of ISOs.

28

<u>SARs</u>. A SAR is the right to receive, upon exercise, an amount equal to the difference between the fair market value of the shares on the date of the SAR's exercise and the aggregate exercise price of the shares covered by the exercised portion of the SAR. The Compensation Committee determines the terms of SARs, including the exercise price (provided that such per share exercise price cannot be less than the fair market value of a share of our common stock on the date of grant), the vesting and the term of the SAR. Settlement of a SAR may be in shares of common stock or in cash, or any combination thereof, as the Compensation Committee may determine. SARs may not be repriced or exchanged without stockholder approval.

<u>Restricted Stock</u>. A restricted stock award is the grant of shares of our common stock to a selected participant and such shares may be subject to a substantial risk of forfeiture until specific conditions or goals are met. The restricted shares may be issued with or without cash consideration being paid by the selected participant as determined by the Compensation Committee. The Compensation Committee also will determine any other terms and conditions of an award of restricted stock.

<u>RSUs</u>. RSUs are the right to receive an amount equal to the fair market value of the shares covered by the RSU at some future date after the grant. The Compensation Committee will determine all of the terms and conditions of an award of RSUs. Payment for vested RSUs may be in shares of common stock or in cash, or any combination thereof, as the Compensation Committee may determine. RSUs represent an unfunded and unsecured obligation for us, and a holder of a stock unit has no rights other than those of a general creditor.

<u>Other Awards</u>. The 2020 Plan also provides that other equity awards, which derive their value from the value of our shares or from increases in the value of our shares, may be granted. In addition, cash awards may also be issued. Substitute awards may be issued under the 2020 Plan in assumption of or substitution for or exchange for awards previously granted by an entity which we may acquire.

Limited Transferability of Awards. Awards granted under the 2020 Plan generally are not transferrable other than by will or by the laws of descent and distribution. However, the Compensation Committee may in its discretion permit the transfer of awards other than ISOs.

<u>Change in Control</u>. In the event that we are a party to a merger or other reorganization or similar transaction, outstanding 2020 Plan awards will be subject to the agreement pertaining to such merger or reorganization. Such agreement may provide for (i) the continuation of the outstanding awards by us if we are a surviving corporation, (ii) the assumption or substitution of the outstanding awards by the surviving entity or its parent, (iii) full exercisability and/or full vesting of outstanding awards, or (iv) cancellation of outstanding awards either with or without consideration, in all cases with or without consent of the selected participant. The Compensation Committee will decide the effect of a change in control of us on outstanding awards.

Amendment and Termination of the 2020 Plan. The Board of Directors generally may amend or terminate the 2020 Plan at any time and for any reason, except that it must obtain stockholder approval of material amendments to the extent required by applicable laws, regulations or rules.

PAY VERSUS PERFORMANCE

The following information is presented about the relationship between executive compensation actually paid ("CAP") and certain financial performance of the Company as required by SEC rules. The Company's executive compensation program is discussed above at "Summary of Named Executive Officer Compensation."

Year	Con	ummary ipensation e Total for PEO (1)	Act	npensation ually Paid to PEO (2)	S Co T	Average Summary mpensation able Total · Non-PEO NEO's (3)	Cor Act to	Average npensation tually Paid Non-PEO NEO's (2)	Fix Inv Based Sha	e of Initial ced \$100 vestment d On Total reholder Return (4)	 Net Income (Loss) (5)
2023	\$	634,565	\$	670,196	\$	550,000	\$	453,624	\$	7.41	\$ (5,087,029)
2022	\$	315,640	\$	315,528	\$	725,739	\$	647,694	\$	16.09	\$ (6,312,535)
2021	\$	250,000	\$	250,000	\$	480,001	\$	238,677	\$	37.54	\$ (6,728,396)

(1) The amounts presented reflect the total compensation set forth in the Summary Compensation Table ("SCT") for the Company's former CEO, Dr. John S. Kovach, and current CEO, Bas van der Baan, who were the Company's PEO's during the years ended December 31, 2023, 2022 and 2021. Dr. Kovach terminated the position of CEO, and Mr. Baan was appointed the successor on September 26, 2023.

29

(2) The following table reflects the adjustments necessary, each of which is prescribed by SEC rule, to calculate the Compensation Actually Paid ("CAP") from those total amounts reflected in the SCT. The SCT amounts and the CAP amounts do not reflect the actual amount of compensation earned by or paid to the Company's executives during the applicable years, but rather are amounts determined in accordance with Item 402 of Regulation S-K under the Exchange Act. To determine CAP, the adjustments below were made to the Company's executive officer's total compensation.

	2023		20	22	2021		
	PEO's	Other NEO's	PEO	Other NEO's	PEO	Other NEO's	
SCT Amounts	\$ 635,565	\$ 550,000	\$ 315,640	\$ 725,739	\$ 250,000	\$ 480,001	
Adjustments Related to Defined Benefit and Actuarial Plans:							
None (6)	_	—		—	_		
Adjustments Related to Stock-Based Compensation: Values reported in Stock Awards and Option Awards columns of the							
SCT	(403,066)	_	(65,640)	(196,920)	_	_	
Year-end fair value of awards granted during the year that are outstanding and unvested at the end of the year	434,409	_	49,118	147,353	_	_	
Decrease in fair value of awards granted in prior years that are outstanding and unvested at year-end	_	(72,405)	_	(39,224)	_	(208,015)	
Fair value of awards granted and vested during the year	39,491	—	16,410	49,230	—	—	

Decrease in fair value of awards granted in prior years that vested						
during the year	—	(23,971)	—	(38,484)		(33,319)
Decrease in fair value of awards granted in prior years that failed to						
meet vesting conditions during the year	(36,203)	_	—	—		
Dividends and other earnings paid on awards before the vesting date	_	_	_	_		
CAP Amounts	\$ 670,196	\$ 453,624	\$ 315,528	\$ 647,694	\$ 250,000	\$ 238,677

- (3) The amounts presented reflect the total compensation set forth in the SCT for the Company's Non-PEO NEOs, James S. Miser, Robert N. Weingarten and Eric J. Forman, during the periods presented.
- (4) The amounts presented reflect the value of a fixed investment of \$100 on January 1st of the reporting period (i.e., January 1, 2021) based upon the closing market price of the Company's common stock of \$2.35, \$5.10, \$11.90 and \$31.70 at December 31, 2023, December 31, 2022, December 31, 2021 and December 31, 2020, respectively, as traded on The Nasdaq Capital Market. All amounts presented herein have been retroactively adjusted to reflect the 1-for-10 reverse split of the Company's common stock effective June 2, 2023.
- (5) The amounts presented reflect the net loss as reported in the Company's audited financial statements for the periods presented.
- (6) The Company had no Defined Benefit or Actuarial Plans during the periods presented.

2	n	
2	υ	

Indemnification Agreements

We have entered into indemnification agreements with each of our directors and executive officers. These indemnification agreements provide the directors and executive officers with contractual rights to indemnification and expense advancement that are, in some cases, broader than the specific indemnification provisions contained under Delaware law.

COMPLIANCE WITH SECTION 16(a) OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires the Company's directors and executive officers, and persons who own more than 10% of a registered class of the Company's equity securities to file various reports with the Securities and Exchange Commission concerning their holdings of, and transactions in, securities of the Company. Copies of these filings must be furnished to the Company. To the Company's knowledge, based solely on its review of the copies of the Section 16(a) reports furnished to the Company and any written representations to the Company that no reports were required, the Company believes that all individual filing requirements applicable to the Company's directors and executive officers were complied with under Section 16(a) during the year ended December 31, 2023.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

During the years ended December 31, 2023, 2022, and 2021, there were no transactions between the Company and any of its officers, directors, or affiliates, including family members, except as otherwise described in this Proxy Statement.

Related Person Transaction Policy

We have adopted a related person transaction policy that sets forth our procedures for the identification, review, consideration and approval or ratification of related person transactions. For purposes of our policy only, a related person transaction is a transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which we and any related person are, were or will be participants in which the amount involved exceeds \$120,000. Transactions involving compensation for services provided to us as an employee or director are not covered by this policy. A related person is any executive officer, director or beneficial owner of more than 5% of any class of our voting securities, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, if a transaction has been identified as a related person transaction, including any transaction that was not a related person transaction when originally consummated or any transaction that was not initially identified as a related person transaction prior to consummation, our management must present information regarding the related person transaction to our audit committee, or, if audit committee approval would be inappropriate, to another independent body of our Board of Directors, for review, consideration and approval or ratification. The presentation must include a description of, among other things, the material facts, the interests, direct and indirect, of the related persons, the benefits to us of the transaction and whether the transaction is on terms that are comparable to the terms available to or from, as the case may be, an unrelated third party or to or from employees generally. Under the policy, we will collect information that we deem reasonably necessary from each director, executive officer and, to the extent feasible, significant stockholder to enable us to identify any existing or potential related-person transactions and to effectuate the terms of the policy. In addition, under our code of business conduct and ethics, our employees and directors will have an affirmative responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest. In considering related person transactions, our audit committee, or other independent body of our Board of Directors, will take into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs and benefits to us;
- the impact on a director's independence in the event that the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties or to or from employees generally.

The policy requires that, in determining whether to approve, ratify or reject a related person transaction, our audit committee, or other independent body of our Board of Directors, must consider, in light of known circumstances, whether the transaction is in, or is not inconsistent with, our best interests and those of our stockholders, as our audit committee, or other independent body of our Board of Directors, determines in the good faith exercise of its discretion.

31

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The table set forth below presents certain information regarding beneficial ownership of our common stock (the only class of our voting equity securities issued and outstanding) as of September 30, 2024 by (i) each person or entity who is known by us to own beneficially more than 5% of our outstanding shares of common stock, (ii) each of our directors, and (iii) all of our directors and executive officers as a group. As of September 30, 2024, there were 2,249,290 shares of our common stock issued and outstanding. In computing the number and percentage of shares beneficially owned by a person, shares of common stock that a person has a right to acquire within sixty (60)

days of September 30, 2024 pursuant to stock options, warrants, convertible preferred stock or other rights are counted as outstanding, while these shares are not counted as outstanding for computing the percentage ownership of any other person. This table is based upon information supplied by our directors, officers and principal stockholders and reports filed with the Securities and Exchange Commission. Except as noted, the Company's executive office is reflected as the address of all officers, directors and other stockholders owning more than 5%.

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership	Percent of Class
Officers and Directors		
Bas van der Baan 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101	125,582(2)	5.3%
Dr. Stephen J. Forman 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101	48,962(3)	2.1%
Dr. Yun Yen 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101	53,339(12)	2.3%
Dr. René Bernards 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101	35,703(6)	1.6%
Regina Brown 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101	64,303(11)	2.8%
Robert N. Weingarten 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101	20,833(7)	0.9%
Eric J. Forman 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101	29,330(5)	1.3%
Dr. Jan H.M. Schellens 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101	1,250(9)	0.1%
All officers and directors as a group (8 persons)	379,302	14.8%
32		
Other Stockholders Owning More Than 5%		
John S. Kovach Trust 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101	156,128(1)	6.9%
Barbara C. H. Kovach 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101	156,128(1)	6.9%
Alexandra E. Kovach 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101	156,128(1)	6.9%
John and Barbara Kovach 2015 Trust		
Glenn L. Krinsky, Trustee 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101	133,333(4)	5.9%
Arthur and Jane Riggs 1990 Irrevocable Trust		

Arthur and Jane Riggs 1990 Irrevocable Trust Jane Riggs, Trustee 4852 Saint Andres Avenue La Verne, California 91750

Glenn L. Krinsky 680 East Colorado Boulevard, Suite 180 Pasadena, California 91101 147,499(10)

(1) Includes 154,018 shares of common stock and stock warrants to purchase 2,110 shares of common stock owned by the John S. Kovach Trust dated September 22, 2015. The primary beneficiary of the trust is Barbara C. H. Kovach. Barbara C. H. Kovach and Alexandra E. Kovach are co-trustees of the trust and have the exclusive right to control the investment of the assets of the trust.

174,750(8)

7.5%

6.6%

(2) Includes 11,000 shares of common stock and stock options to purchase 114,852 shares of common stock owned by Bas van der Baan.

(3) Includes 375 shares of common stock and stock options to purchase 39,377 shares of common stock owned by Dr. Stephen Forman. Also includes 7,105 shares of common stock and stock warrants to purchase 2,105 shares of common stock owned by the Stephen Forman Living Trust dated 12/16/98. Stephen Forman is trustee of the trust and holds voting and dispositive power over the common stock and common stock warrants owned by the trust.

(4) Includes 133,333 shares of common stock transferred by John S. Kovach and his wife, Barbara C.H. Kovach, as grantors, to the John and Barbara Kovach 2015 Trust, an irrevocable trust dated July 6, 2015. The primary beneficiaries of the trust are the two adult daughters of John and Barbara Kovach. Glenn L. Krinsky is the trustee of the trust.

(5) Includes stock options to purchase 20,833 shares of common stock owned by Eric J. Forman, who is the husband of Julie (Schwartzberg) Forman and the son-in-law of the late Gil and Debbie Schwartzberg. Gil Schwartzberg passed away on October 30, 2022.

Also includes the following:

7,971 shares of common stock and stock warrants to purchase 526 shares of common stock owned by the Eric Forman Revocable Trust.

Excludes the following, as to which Eric Forman disclaims beneficial ownership or control:

- 31,842 shares of common stock owned by the Julie Schwartzberg Trust, as to which Julie (Schwartzberg) Forman is the trustee and beneficiary.
- 14,286 shares of common stock owned by the Schwartzberg Trust fbo Julie Forman, dtd 3/3/23, as to which Julie Forman is the trustee.
- 6,972 shares of common stock and common stock warrants to purchase 5,263 shares of common stock owned by the Julie Forman Inherited IRA.
- 8,708 shares of common stock owned by the Julie Forman 2015 Trust, an irrevocable trust, the beneficiaries of which are the minor children of Eric and Julie Forman, as to which Scott Forman, brother of Eric Forman, as trustee, has voting, dispositive and investment control.
- 9,000 shares of common stock owned by each of the Savannah Sterling Trust, Amanda Sterling Trust, Daniel Sterling Trust and Charles Sterling Trust, as to which Julie Forman is the trustee.

(6) Consists of 25,000 shares of common stock and stock options to purchase 10,703 shares of common stock.

(7) Consists of stock options to purchase 20,833 shares of common stock.

(8) Includes 101,833 shares of common stock and 72,917 shares of common stock issuable upon conversion of 350,000 shares of Series A Convertible Preferred Stock owned by the Arthur and Jane Riggs 1990 Irrevocable Trust dated November 18, 1990. Jane Riggs is the trustee of the Arthur and Jane Riggs 1990 Irrevocable Trust. The shares of Series A Convertible Preferred Stock were acquired on March 17, 2015 and January 15, 2016 are non-voting and are immediately convertible into common stock.

(9) Consists of stock options to purchase 1,250 shares of common stock.

34

(10) Includes 14,166 shares of common stock owned by Glenn L. Krinsky. Also includes 133,333 shares of common stock owned by the John and Barbara Kovach 2015 Trust, as to which Glenn L. Krinsky, as trustee, has voting, dispositive and investment control.

(11) Includes 630 shares of common stock and stock options to purchase 63,673 shares of common stock.

(12) Includes 5,263 shares of common stock, stock warrants to purchase 5,263 shares of common stock and stock options to purchase 42,813 shares of common stock.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for proxy statements and other Annual Meeting materials with respect to two or more stockholder sharing the same address by delivering a proxy statement or other Annual Meeting materials addressed to those stockholders. This process, which is commonly referred to as "householding", potentially means extra convenience for stockholders and cost savings for companies. Stockholders who participate in householding will continue to be able to access and receive separate proxy cards.

If you share an address with another stockholder and have received multiple copies of our proxy materials, you may write or call us at the address and phone number below to request delivery of a single copy of the notice and, if applicable, other proxy materials in the future. We undertake to deliver promptly upon written or oral request a separate copy of the proxy materials, as requested, to a stockholder at a shared address to which a single copy of the proxy materials was delivered. If you hold stock as a record stockholder and would prefer to receive separate copies of our proxy materials, either now or in the future, please notify your broker or the Company. Written requests to the Company should be directed to Lixte Biotechnology Holdings, Inc., ATTN: Secretary, 680 East Colorado Boulevard, Suite 180, Pasadena, California 91101, or you may contact the Secretary of the Company at 631-830-7092. If your stock is held through a brokerage firm or bank and you prefer to receive separate copies of our proxy materials either now or in the future, please contact your brokerage firm or bank.

OTHER BUSINESS

As of the date of this Proxy Statement, the management of the Company has no knowledge of any business that may be presented for consideration at the Annual Meeting, other than that described above. As to other business, if any, that may properly come before the Annual Meeting, or any adjournment thereof, it is intended that the Proxy hereby solicited will be voted in respect of such business in accordance with the judgment of the Proxy holders.

BY ORDER OF THE BOARD OF DIRECTORS

/s/ Bas van der Baan Chairman of the Board

November 8, 2024