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.

File	ed by the Registrant ⊠		
File	Filed by a party other than the Registrant \square		
Che	Check the appropriate box:		
	Preliminary Proxy Statement		
	Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))		
\boxtimes	Definitive Proxy Statement		
	Definitive Additional Materials		
	Soliciting Material Pursuant to §240.14a-12		
	Precigen, Inc.		
	(Name of Registrant as Specified In Its Charter)		
	(Name of Person(s) Filing Proxy Statement, if Other Than The Registrant)		
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	Fee paid previously with preliminary materials.		
	Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11.		

PRECIGEN, INC. 20374 Seneca Meadows Parkway Germantown, Maryland 20876

NOTICE OF 2023 ANNUAL MEETING OF SHAREHOLDERS To Be Held On June 8, 2023

To Our Shareholders:

You are cordially invited to attend the 2023 Annual Meeting of Shareholders (the "Annual Meeting") of Precigen, Inc. ("Precigen," "we," "us," "our," or the "Company") to be held in virtual meeting format only at 9:00 a.m. Eastern Time, Thursday, June 8, 2023, for the following purposes:

- to elect the nine nominees named in the accompanying Proxy Statement to the Board of Directors, each to serve a one-year term expiring at the earlier of the next Annual Meeting or until his or her successor is duly elected and qualified;
- 2. to ratify the appointment by the Audit Committee of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023;
- to approve a non-binding advisory resolution approving the compensation of the named executive officers:
- 4. to approve the Precigen, Inc. 2023 Omnibus Incentive Plan; and
- 5. to transact any other business that may properly be brought before the Annual Meeting or any adjournments or postponements thereof.

To join the meeting webcast, go to www.VirtualShareholderMeeting.com/PGEN2023 shortly before the meeting time and follow the instructions.

As of the date of this notice, we have not received notice of any matters, other than those set forth above, that may properly be presented at the Annual Meeting. If any other matters are properly presented for consideration at the meeting, the persons named as proxies on the proxy card, or their duly constituted substitutes, will be deemed authorized to receive notice on behalf of and to vote the shares represented by proxy or otherwise act on those matters in accordance with their business judgment.

The Board of Directors has fixed the close of business on April 17, 2023 as the record date for determining those shareholders entitled to notice of and to vote at the Annual Meeting. As permitted by rules adopted by the Securities and Exchange Commission, we are furnishing our Proxy Statement and Annual Report on Form 10-K for the year ended December 31, 2022 (the "2022 Annual Report") over the internet to our shareholders. This means that our shareholders will receive only a notice containing instructions on how to access the proxy materials over the internet. If you would like to receive a paper copy of the proxy materials, the notice contains instructions on how you can request copies of these documents.

Your vote is very important to us. Please read the Proxy Statement and then, regardless of whether you are able to attend the Annual Meeting, vote your shares as promptly as possible. Please note that in the absence of specific instructions as to how to vote, brokers may not vote your shares on the election of directors, the non-binding proposal to approve the compensation of the named executive officers or the proposal to approve the Precigen, Inc. 2023 Omnibus Incentive Plan. You may revoke your proxy and change your vote by entering new instructions on either the telephone or internet voting system before 11:59 p.m. Eastern Time on June 7, 2023, by submitting a proxy with a later date before the polls close at the Annual Meeting, by delivering a written revocation to our Corporate Secretary such that it is received before the polls close at the Annual Meeting, or by voting your shares at the Annual Meeting. Please note that voting in advance in any of the ways described will not prevent you from attending the Annual Meeting should you choose to do so. Whether or not you attend the Annual Meeting, please vote your shares as promptly as possible.

By Order of the Board of Directors, DONALD P. LEHR Corporate Secretary Germantown, Maryland April 25, 2023

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE ANNUAL MEETING OF SHAREHOLDERS TO BE HELD ON June 8, 2023

Our Proxy Statement and our 2022 Annual Report are available online, free of charge, at https://materials.proxyvote.com.

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PRECIGEN, INC. 20374 Seneca Meadows Parkway Germantown, Maryland 20876

PROXY STATEMENT 2023 Annual Meeting of Shareholders

This Proxy Statement and the accompanying proxy card are being furnished to you by the Board of Directors (the "Board") of Precigen, Inc. to solicit your proxy to vote your shares at our Annual Meeting, or at any adjournments or postponements thereof. The Annual Meeting will be held via an interactive webcast and will be called to order at 9:00 a.m. Eastern Time, on Thursday, June 8, 2023. To join the meeting webcast, go to <code>www.VirtualShareholderMeeting.com/PGEN2023</code> at least fifteen minutes before the meeting time and follow the instructions. You will need the 16-digit control number on your proxy card or voting instructions to join the meeting.

On or about April 25, 2023, we will commence mailing a notice to shareholders containing instructions on how to access the Proxy Statement, including the accompanying notice and the 2022 Annual Report, and on how to vote. These materials are being made available to you on the internet at www.proxyvote.com, however, we will promptly deliver printed versions of these materials to you by mail upon your request if submitted by May 26, 2023. Requests should be sent to the Corporate Secretary in writing at Precigen, Inc., 20374 Seneca Meadows Parkway, Germantown, Maryland 20876.

QUESTIONS AND ANSWERS ABOUT THE ANNUAL MEETING

1. Who is asking for my vote and why am I receiving this document?

The Board asks that you vote on the matters listed in the Notice of 2023 Annual Meeting of Shareholders, which are more fully described in this Proxy Statement. We are providing this Proxy Statement and related proxy card to our shareholders in connection with the solicitation by the Board of proxies to be voted at the Annual Meeting. A proxy, if duly executed and not revoked, will be voted and, if it contains any specific instructions, will be voted in accordance with those instructions.

2. Who is entitled to vote?

Only holders of record of outstanding shares of our common stock at the close of business on April 17, 2023, are entitled to notice of and to vote at the Annual Meeting. At the close of business on April 17, 2023, there were 255,482,753 outstanding shares of common stock. Each share of common stock is entitled to one vote on each matter properly brought before the Annual Meeting.

3. What is a proxy?

A proxy is your legal designation of another person to vote the stock you own. If you designate someone as your proxy or proxy holder in a written document, that document is called a proxy or a proxy card. Dr. Helen Sabzevari and Mr. Donald P. Lehr, or each of them, each with the power to appoint his or her substitute, have been designated as proxies or proxy holders for the Annual Meeting. A proxy properly executed and received by our Corporate Secretary by 11:59 p.m. Eastern Time on June 7, 2023 and not revoked will be voted in accordance with the terms thereof.

4. What is a voting instruction?

A voting instruction is the instruction form you receive from your bank, broker, or its nominee if you hold your shares of common stock in street name. The instruction form instructs you how to direct your bank, broker, or its nominee, as record holder, to vote your shares of common stock.

5. What am I voting on?

Shareholders are being asked to vote on each of the following items of business:

• the election to the Board of the nine nominees named in this Proxy Statement, each to serve a oneyear term expiring at the earlier of the next Annual Meeting or until his or her successor is duly elected and qualified;

- the ratification of the appointment by the Audit Committee of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023;
- the approval of a non-binding advisory resolution approving the compensation of the named executive officers; and
- the approval of the Precigen, Inc. 2023 Omnibus Incentive Plan (the "2023 Plan").

In addition, any other matters that properly come before the Annual Meeting or any adjournment or postponement thereof will be considered. The persons named in the enclosed proxy card or voting instruction will vote the shares of common stock represented by the proxy in the manner as the Board may recommend, or otherwise at the proxy holders' discretion. Neither management nor the Board presently knows of any other such matters.

6. How many votes must be present to hold the Annual Meeting?

A majority of the outstanding shares of common stock entitled to be cast as of the record date must be present in person or represented by proxy at the Annual Meeting. This is referred to as a quorum. Abstentions and shares of record held by a broker or its nominee ("broker shares") that are not voted on any matter ("broker non-votes") are included in determining the existence of a quorum.

7. What are the voting requirements to elect directors and approve the other proposals described in the Proxy Statement?

The vote required to elect directors and approve each of the matters scheduled for a vote at the annual meeting is set forth below:

Proposal	Vote Required
1. Election of directors	Majority of votes cast
2. Ratification of appointment of Deloitte & Touche LLP	Majority of votes cast
3. Advisory vote to approve executive compensation	Majority of votes cast
4. Approval of the 2023 Plan	Majority of votes cast

Votes may be cast by proxy or in person. A "majority" of votes cast means that more votes were cast "for" the proposal than "against." Abstentions and broker non-votes (described under "How are abstentions and broker non-votes counted?") are not considered as votes cast and will have no effect on the vote outcome for Proposals 1, 2,3 and 4. As it relates to the election of our directors, our Corporate Governance Guidelines provide that any nominee for director in an uncontested election who receives a greater number of shareholder votes cast "against" his or her election than votes "for" his or her election must, promptly following certification of the shareholder vote, tender his or her resignation to the Board for consideration. For more details regarding the director resignation policy, please see "Election of Directors."

8. What are the voting recommendations of the Board?

For the reasons set forth in more detail later in this Proxy Statement, **the Board unanimously recommends that you vote**:

- FOR the proposed nominees to the Board named in this Proxy Statement;
- **FOR** the ratification of the appointment of Deloitte & Touche LLP;
- **FOR** the approval of the non-binding advisory resolution to approve the compensation of our named executive officers; and
- FOR the approval of the 2023 Plan.

9. How do I vote?

Registered shareholders (shareholders who hold common stock in certificated form or book entry form on the records of our transfer agent as opposed to through a bank, broker or other nominee) may vote in person at the Annual Meeting or by proxy. There are three ways for registered shareholders to vote by proxy before the Annual Meeting:

- **By Internet**: Connect to the internet at www.proxyvote.com and follow the instructions included on the proxy card or voting instruction. Your proxy will be voted according to your instructions. If you vote by internet, you do not need to mail in a proxy card or voting instruction.
- *By Telephone*: Call 1-800-690-6903 and follow the instructions included on the proxy card or voting instruction. If you vote by telephone, you do not need to mail in a proxy card or voting instruction.
- **By Mail**: If you received your proxy materials by mail, complete, properly sign, date, and mail the enclosed proxy card.

Registered shareholders are urged to deliver proxies by using the internet, calling the toll-free telephone number, or by completing and mailing the proxy card. The internet and telephone voting procedures are designed to authenticate shareholders' identities, to allow shareholders to give their proxies, and to confirm that such instructions have been recorded properly. Instructions for voting over the internet or by telephone are included on the enclosed proxy card. If you received your proxy materials via mail, registered shareholders may send their proxies by completing, signing, and dating the enclosed proxy card and returning it as promptly as possible in the enclosed prepaid envelope. The deadline for voting via the internet or telephone is 11:59 p.m., Eastern Time, on June 7, 2023.

Shareholders who hold common stock through banks, brokers, or other nominees ("street name shareholders") who wish to vote at the Annual Meeting should receive voting instructions from the institution that holds their shares. Please contact the institution that holds your shares if you have not received voting instructions. Street name shareholders may also be eligible to vote their shares electronically by following the voting instructions provided by the bank, broker, or other nominee that holds the shares, using either the toll-free telephone number or the internet address provided on the voting instruction; or by completing, dating, and signing the voting instruction and returning it promptly in the enclosed prepaid envelope.

Shareholders can also vote via the internet during the virtual Annual Meeting by visiting: www.virtualshareholdermeeting.com/PGEN2023. Only shareholders of record at the close of business on the record date, April 17, 2023, are entitled to participate in and to vote at the virtual Annual Meeting. To participate in the Annual Meeting, you will need the 16-digit control number included on your Notice of Internet Availability of Proxy Materials, or on your proxy card or on your voting instruction form.

10. Can I attend the Annual Meeting?

Yes. The Annual Meeting is open to all holders of our common stock as of the record date, April 17, 2023. However, even if you plan to attend the Annual Meeting, we encourage you to vote your shares in advance. You can attend the Annual Meeting live via the internet by visiting: www.virtualshareholdermeeting.com/PGEN2023. Online check-in will begin at 8:45 a.m. Eastern Time. Please allow ample time for the online check-in process. Please note that there is no in-person location for you to attend.

To participate in the Annual Meeting, you will need the 16-digit control number included on your Notice of Internet Availability of Proxy Materials or on your proxy card or any additional voting instructions that accompanied your proxy materials.

11. How do I attend the virtual Annual Meeting? How can I ask questions during the Annual Meeting? What if I experience technical difficulties at log-in or during the Annual Meeting?

Our virtual Annual Meeting will be conducted on the internet via webcast. You will be able to participate online and submit your questions during the Annual Meeting by visiting www.virtualshareholdermeeting.com/PGEN2023. Shareholders will be able to vote their shares electronically during the Annual Meeting. To participate in the Annual Meeting, you will need the 16-digit control number on your proxy card of voting instruction form. The Annual Meeting will begin promptly at 9:00 am Eastern Time.

Shareholders may submit questions during the Annual Meeting. If you wish to submit a question, you may do so by logging into the virtual meeting platform at www.virtualshareholdermeeting.com/PGEN2023, typing your question into the "Ask a Question" field, and clicking "Submit." Questions pertinent to the Annual Meeting will be addressed during the Annual Meeting, subject to time constraints.

If you encounter any difficulties accessing the virtual Annual Meeting during the check-in or meeting time, please call the technical support number that will be posted on the virtual Annual Meeting login page for assistance. Technical assistance will be available through the conclusion of the Annual Meeting.

12. How will my shares be voted if I sign, date, and submit my proxy or voting instruction, but do not provide complete voting instructions with respect to each proposal?

Shareholders should specify their vote for each matter on the proxy or voting instruction. The proxies solicited by this Proxy Statement vest in the proxy holders voting rights with respect to the election of directors (unless the shareholder marks the proxy to withhold that authority) and on all other matters voted upon at the Annual Meeting.

Unless otherwise directed in the enclosed proxy card, the persons named as proxies therein will vote all properly executed, returned, and not-revoked proxy cards or voting instruction cards: (i) "FOR" the election of the nine director nominees listed thereon; (ii) "FOR" the proposal to ratify the appointment by the Audit Committee of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023; (iii) "FOR" the non-binding proposal to approve the compensation of our named executive officers; and (iv) "FOR" the approval of the 2023 Plan.

13. How will my shares be voted if I do not return my proxy or my voting instruction?

It will depend on how your ownership of shares of common stock is registered. If you own your shares as a record holder, which means that your shares of common stock are registered in your name, if you do not vote in advance of the Annual Meeting by submitting a proxy, your unvoted shares will not be represented at the Annual Meeting and will not count toward the quorum requirement, as explained under "How many votes must be present to hold the Annual Meeting?," unless you attend the Annual Meeting to vote them in person.

If you are a street name shareholder and your shares are registered in the name of your bank, broker or its nominee, your shares may be voted even if you do not provide your bank, broker, or other nominee with voting instructions. Your bank, broker, or other nominee may vote your shares in its discretion on "routine" matters. However, your bank, broker, or other nominee may not vote your shares on proposals that are not considered routine. When a proposal is not a routine matter and your bank, broker, or other nominee has not received your voting instructions with respect to such proposal, your bank, broker, or other nominee cannot vote your shares on that proposal. When a bank, broker, or other nominee does not cast a vote for a non-routine matter, it is called a "broker non-vote."

Therefore, please note that in the absence of your specific instructions as to how to vote, your bank, broker, or other nominee may not vote your shares with respect to the election of directors, the non-binding proposal to approve the compensation of the named executive officers, or the proposal to approve the 2023 Plan. These matters are not considered routine matters. However, the ratification of the appointment by the Audit Committee of Deloitte & Touche LLP is a routine matter for which brokerage firms may vote on behalf of their clients if no voting instructions are provided. Therefore, if you are a street name shareholder whose shares of common stock are held with a bank, broker, or other nominee and you do not return your voting instructions, your bank, broker, or other nominee may vote your shares on the ratification of the appointment of Deloitte & Touche LLP as our independent registered public accounting firm. *Please return your proxy so your vote can be counted*.

14. How are abstentions and broker non-votes counted?

Only votes cast "for" or "against" are included in determining the votes cast with respect to any matter presented for consideration at the Annual Meeting. As described above, when brokers do not have discretion to vote or do not exercise such discretion, the inability or failure to vote is referred to as a "broker non-vote." Proxies marked as abstaining, and any proxies returned by brokers as "non-votes" on behalf of shares held in street name because beneficial owners did not vote on one or more matters to be acted upon at the Annual Meeting, will be treated as present for purposes of determining whether a quorum is present at the Annual Meeting. Broker non-votes and abstentions will not be included in the vote total for the proposal to elect the nominees for director and will not affect the outcome of the vote for the proposal. In addition, under Virginia corporate law, abstentions are not counted as votes cast on a proposal. Therefore, abstentions

and broker non-votes will not count either in favor of or against (i) the election of directors, (ii) the ratification of the appointment of Deloitte & Touche LLP, (iii) the non-binding proposal to approve the compensation of the named executive officers, and (iv) the approval of the 2023 Plan.

15. What if I change my mind after I vote?

Whether you vote by internet, telephone, or by mail, you may later revoke your proxy and change your vote before 11:59 p.m. Eastern Time on Wednesday, June 7, 2023 by:

- entering new instructions on either the telephone or internet voting system before 11:59 p.m. Eastern Time on Wednesday, June 7, 2023;
- delivering a properly signed proxy with a later date than the previously submitted proxy card before the polls close at the Annual Meeting;
- delivering a written revocation to our Corporate Secretary at 20374 Seneca Meadows Parkway, Germantown, Maryland 20876; or
- · voting virtually at the Annual Meeting.

Attendance at the virtual Annual Meeting alone without voting will not revoke a previously granted proxy. If you are a street name shareholder whose stock is held with a bank, broker, or other nominee, you must follow the instructions found on the voting instruction card provided by the bank, broker, or other nominee, or contact your bank, broker, or other nominee to change or revoke your previously given proxy.

16. Who pays the cost of proxy solicitation?

We will pay all expenses of soliciting proxies, including clerical work, printing, and postage. Our officers and other employees may personally solicit proxies or solicit proxies by internet, telephone, mail, or facsimile, but we will not provide any compensation for such solicitations. We will also reimburse banks, brokers, and other persons holding shares in their names or in the names of nominees for expenses incurred sending material to beneficial owners and obtaining proxies from beneficial owners.

17. Could other matters be decided in the Annual Meeting?

The Board does not know of any other business that may be brought before the Annual Meeting. However, if any other matters should properly come before the Annual Meeting or at any adjournment or postponement thereof, it is the intention of the persons named in the accompanying proxy to vote on such matters as they, in their discretion, may determine.

18. How do I make a shareholder proposal for the 2024 Annual Meeting of Shareholders?

Pursuant to Rule 14a-8 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), we must receive any proposals from shareholders intended for inclusion in the proxy statement for our 2024 Annual Meeting of Shareholders no later than 120 days before the anniversary date of the distribution of this Proxy Statement (i.e., December 27, 2023). Holders of common stock who wish to have proposals submitted for inclusion in the proxy statement for our 2024 Annual Meeting of Shareholders should consult the applicable rules and regulations of the SEC with respect to such proposals, including certain information required to be in the proposal, the permissible number and length of proposals, and other matters governed by such rules and regulations. Proposals should be submitted to Precigen, Inc., 20374 Seneca Meadows Parkway, Germantown, Maryland 20876.

The Bylaws also set forth the procedures a shareholder must follow to nominate directors or to bring other business before shareholder meetings. For a shareholder to nominate a candidate for director or bring other matters pursuant to these procedures at the 2024 Annual Meeting of Shareholders, we must receive notice of the nomination or proposal no earlier than the close of business on February 9, 2024 and no later than the close of business on March 10, 2024, provided, however, that if our 2024 Annual Meeting of Shareholders is scheduled to be held before May 9, 2024 or after August 17, 2024, notice shall be delivered not earlier than the close of business on the 120th day prior to such meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the day we announce the new meeting date. For the nomination of a candidate for director, the notice must describe

various matters as set forth in our Bylaws, including regarding the nominee, including name, address, occupation, and shares held. In addition to complying with the advance notice provisions of our Bylaws, to nominate a director, shareholders must give timely notice that complies with the additional requirements of Rule 14a-19, and which must be received no later than April 9, 2024. For bringing other proposals of business pursuant to these procedures at the 2024 Annual Meeting of Shareholders, the notice must include a description of the proposed business, the reasons therefor, and other matters specified in our Bylaws. In each case, the notice must be timely given in writing to our Corporate Secretary, whose address is 20374 Seneca Meadows Parkway, Germantown, Maryland 20876.

CORPORATE GOVERNANCE

General

Our business and affairs are managed under the direction of the Board in accordance with the Virginia Stock Corporation Act, our Amended and Restated Articles of Incorporation, and our Bylaws. Our Bylaws provide that the number of directors shall be fixed from time to time by the Board, but shall not be more than ten. The Board is currently comprised of the following ten individuals: Randal Kirk, the Executive Chairman of the Board, Cesar Alvarez, Steven Frank, Vinita Gupta, Fred Hassan, Jeffrey Kindler, Dean Mitchell, Dr. Helen Sabzevari, our Chief Executive Officer ("CEO"), Robert Shapiro, and James Turley. Nine out of the ten current directors are being nominated for election to the Board at the Annual Meeting. Mr. Shapiro has not been nominated for reelection, and will be retiring at the Annual Meeting. The Board has reduced its size to nine directors, effective as of the Annual Meeting. For more information regarding the nominees for election to the Board, see "Nominees for Election as Directors."

Corporate Governance Guidelines

The Board has adopted corporate governance guidelines (the "Corporate Governance Guidelines") that set forth the practices of the Board with respect to the qualification, selection and election of directors, director orientation and continuing education, director responsibilities, Board composition and performance, director access to management and independent advisors, director compensation guidelines, management evaluation and succession, policies regarding the Lead Independent Director, meetings of the nonmanagement directors, the policy on communicating with the non-management directors, and various other issues. A copy of our Corporate Governance Guidelines is available on our website at http://investors.precigen.com under the caption "Governance." Neither the Corporate Governance Guidelines, our website nor any documents or information contained therein are incorporated by reference to this proxy statement.

Board Standards of Independence

The Board has set forth our independence standards in our Corporate Governance Guidelines and bylaws. These standards provide that a majority of the Board must be independent under the independence standards established by the Corporate Governance Guidelines, The Nasdaq Stock Market ("Nasdaq") and the New York Stock Exchange ("NYSE") as in effect from time to time. For a Board member or candidate for election to the Board to qualify as independent, the Board must determine that the person and his or her family members do not have a material relationship with us (either directly or as a partner, shareholder, or officer of an organization that has a relationship with us) or any of our affiliates. Under the categorical standards adopted by the Board, a member of the Board is not independent if:

- The director is, or has been within the last three years, our employee, or whose family member is, or has been within the last three years, an executive officer of the Company;
- The director has received, or has a family member serving as an executive officer who has received, during any 12-month period within the three years preceding the determination of independence, more than \$120,000 in direct compensation from us, other than director and committee fees, compensation made to a family member who is an employee (other than an executive officer) of the Company, and benefits under a tax-qualified retirement plan or non-discretionary compensation;
- (i) The director is a current partner of a firm that is our internal or external auditor; (ii) the director
 has a family member who is a current partner of such a firm; or (iii) the director, or a family member,
 was within the last three years a partner or employee of such a firm and personally worked on our
 audit within that time;
- The director or a family member is, or has been within the last three years, employed as an executive
 officer of another company where any of our present executive officers at the same time serves or
 served on that company's compensation committee; or
- The director is or a family member is, a partner in (excluding limited partners), or a controlling shareholder or executive officer of, any organization to which we made, or from which we received,

payments for property or services in an amount which, in any of the last three fiscal years, exceeds the greater of \$200,000, or 5%, of such other company's consolidated gross revenues.

With the exception of Mr. Kirk, our Executive Chairman of the Board, and Dr. Sabzevari, our CEO, the Board has affirmatively determined that each of Cesar Alvarez, Steven Frank, Vinita Gupta, Fred Hassan, Jeffrey Kindler, Dean Mitchell, Robert Shapiro, and James Turley is independent in accordance with the above standards and applicable Nasdaq and NYSE guidelines.

In determining that Mr. Alvarez is independent, the Board considered that Mr. Alvarez is the Senior Chairman of Greenberg Traurig, LLP ("Greenberg Traurig"). As discussed under "Certain Relationships and Related Party Transactions," Greenberg Traurig provides legal services to us from time to time for which it has received, and may continue to receive, customary fees. During 2020, 2021 and 2022, we paid Greenberg Traurig \$1,350,502, \$9,767 and \$0, respectively, for legal services, constituting less than 5% of Greenberg Traurig's annual gross revenues. As the Senior Chairman, Mr. Alvarez does not participate in the provision of such services and does not materially benefit from the engagement, and his compensation from Greenberg Traurig is not based on such services provided to us. The Board has determined that this relationship is not material and that it does not impair Mr. Alvarez's independence.

In determining that Mr. Turley is independent, the Board considered that Mr. Turley is the former Chairman and Chief Executive Officer of Ernst & Young LLP. From time to time, Ernst & Young provides strategy consulting, valuation and technical accounting services to us, for which it receives customary fees. As Mr. Turley retired from Ernst & Young over nine years ago in June 2013, Mr. Turley does not participate in such services and does not materially benefit from the engagement. The Board has determined that this relationship is not material and that it does not impair Mr. Turley's independence.

Board Meetings and Attendance at Annual Meeting of Shareholders

There were 11 meetings of the Board held either in person or by teleconference in 2022. Each director except for Steven Frank attended at least 75% of the combined meetings of the Board and the committees on which he or she served during the year scheduled during the time each member was a director. Mr. Frank attended all regularly scheduled meetings. Our independent directors meet in executive session without management at least quarterly.

Our Corporate Governance Guidelines provide that all directors are strongly encouraged to attend all annual and special meetings of our shareholders. All members of the Board at the time of the 2022 Annual Meeting attended the 2022 Annual Meeting.

Board Leadership Structure

As specified in the Corporate Governance Guidelines, the Board does not have a policy on whether the roles of the CEO and Chairman should be separate or, if they are to be separate, whether the Chairman should be selected from the non-employee directors or be an employee. Currently, the roles are separate. Mr. Kirk currently serves as Executive Chairman and Dr. Sabzevari serves as CEO. Prior to Dr. Sabzevari assuming the role of CEO in January 2020 and Mr. Kirk becoming Executive Chairman, Mr. Kirk had served as Chairman of the Board since February 2008 and CEO since April 2009. We believe that separating the Executive Chairman and CEO roles at this time allows us to efficiently develop and implement corporate strategy consistent with the Board's oversight role while also facilitating strong day-to-day executive leadership.

The Board believes that Mr. Kirk is well situated to serve as Executive Chairman because his unique and extensive experience and deep understanding of our business as well as his broad business experience as CEO of, and significant investor in, multiple successful biotech companies enable him to deliver strategic insight on key issues, to serve as a valuable bridge between the Board and management, and to provide valuable leadership experience. Mr. Kirk's Executive Chairman responsibilities include the following:

- · advising and supporting the CEO on governance matters;
- serving as a liaison between the Board and senior management;
- · acting as a source of institutional knowledge;

- together with the Lead Independent Director, and with input from the non-management and independent Board members, preparing the Board's agenda;
- · chairing and guiding discussion at Board meetings; and
- performing such other duties and responsibilities as may be delegated to the Executive Chairman by the Board from time to time.

Mr. Turley currently serves as our Lead Independent Director. The Board established the position of Lead Independent Director in the Corporate Governance Guidelines to serve as a principal liaison between the independent directors and the Executive Chairman and the CEO as well as to coordinate the activities of the other independent directors. The Lead Independent Director is in frequent contact with the Executive Chairman and the CEO and is regularly consulted on material matters. We currently maintain a significant majority of independent directors (Mr. Kirk and Dr. Sabzevari are the only non-independent directors). The Lead Independent Director is elected by the independent directors and ensures that the Board operates independently of management, and that directors and shareholders have an independent leadership contact.

The responsibilities of the Lead Independent Director of the Board include the following:

- presiding over meetings of the non-management and independent Board members and, as appropriate, provide prompt feedback to the CEO and Executive Chairman;
- together with the Executive Chairman, and with input from the non-management and independent Board members, preparing the Board's agenda;
- serving as a point of contact between non-management and independent Board members and the CEO on board-wide matters;
- calling executive sessions of the Board or of the non-management and independent Board members;
- serving as a "sounding board" and mentor to the CEO;
- taking the lead in assuring that the Board carries out its responsibilities in circumstances where the Executive Chairman is incapacitated or otherwise unable to act;
- consulting with the Chairman of the Compensation and Human Capital Management Committee (the "Compensation Committee") to provide performance feedback and compensation information to the CEO and the Executive Chairman; and
- performing such other duties and responsibilities as may be delegated to the Lead Independent Director by the Board from time to time.

As part of the Board's annual assessment process, the Board evaluates the Board's leadership structure to ensure that it remains appropriate. The Board recognizes that there may be circumstances in the future that would lead it to combine the roles of CEO and Chairman of the Board or to have an independent Chairman, but believes that the absence of a policy requiring either the separation or combination of these roles provides the Board with the flexibility to determine the best leadership structure.

The Board's Role in Risk Oversight

The Board is responsible for our risk oversight, and each committee of the Board is responsible for risk oversight within such committee's area of responsibility and regularly reports to the Board regarding the same. Management is responsible for our risk management, including providing working to ensure our policies are carried out and processes are executed in accordance with our performance goals and risk tolerance. On a regular basis, our management team identifies, discusses, and assesses financial risk from current macroeconomic, industry, and company perspectives. Our management team also provides regular reports to the Board and its committees on areas of our material risk, including operational, financial, legal, and regulatory as well as strategic and reputational risks.

The Audit Committee is responsible for discussing with management our major financial risk exposures and the steps and processes management has taken to monitor and control such exposures, including our risk assessment and risk management policies. As part of its regular reporting process, management reports

and reviews with the Audit Committee our material risks, including, but not limited to, proposed risk factors and other public disclosures, mitigation strategies, and our internal controls over financial reporting. The Audit Committee also engages in regular periodic discussions with the Chief Financial Officer and other members of management regarding risks, as appropriate.

In carrying out its responsibilities, the Compensation Committee considers the impact of executive and employee compensation on our risk profile, as well as overseeing the development, implementation and effectiveness of our human capital management policies, programs and initiatives, including with respect to recruitment, retention and development of our employees. The Compensation Committee's responsibilities also include the consideration of succession planning for our Chief Executive Officer and other executive officers.

The Nominating and Governance Committee's responsibilities include the consideration of corporate governance matters and risks. The Nominating and Governance Committee also oversees the Company's environmental, social and governance, or ESG matters. The Nominating and Governance Committee's duties include considering with management public policy issues that may affect the Company, including pertinent ESG matters.

Each committee regularly reports to the Board. Moreover, the Board reviews and oversees our various financial policies, financing programs, capital and operating plans, benefit plan management, ESG matters and certain risk management policies. We believe the current leadership structure of the Board supports the risk oversight functions described above by providing independent leadership at each of the committee levels, with ultimate oversight by the full Board, as led by the Executive Chairman and the Lead Independent Director.

Board Committees

The Board maintains three standing committees: the Audit Committee; the Compensation Committee; and the Nominating and Governance Committee. Each of these committees has a separate chairperson and is composed entirely of directors that meet the applicable independence requirements of the SEC, Nasdaq and NYSE. Each committee operates under a written charter that is reviewed periodically and, has been approved, by the Board. A current copy of each committee's charter is available on our website at http://investors.precigen.com under the caption "Governance." In addition, from time to time, the Board may create ad hoc committees for specific purposes.

Audit Committee

The members of the Audit Committee are Messrs. Kindler, Mitchell, and Shapiro. Mr. Kindler is the chair of the Audit Committee. During 2022, the Audit Committee met 4 times. The Board has determined that each member of the Audit Committee is "independent" within the meaning of the enhanced independence standards for audit committee members in the Exchange Act, and the rules thereunder, as incorporated into the listing standards of Nasdaq and NYSE, and the independence standards of our Corporate Governance Guidelines as discussed above under "CORPORATE GOVERNANCE — Board Standards of Independence." The Board has further determined that Mr. Kindler qualifies as an "audit committee financial expert" within the meaning of SEC regulations and is "financially sophisticated" within the meaning of the Nasdaq rules. The Audit Committee assists the Board in its oversight of our accounting and financial reporting process and the audits of our consolidated financial statements. The Audit Committee's responsibilities include, among other things, overseeing:

- · our accounting and financial reporting processes;
- the integrity of our consolidated financial statements;
- · our compliance with laws and regulations;
- our independent registered public accounting firm's qualifications and independence; and
- the performance of our independent registered public accounting firm.

The Audit Committee appoints, oversees, and evaluates the performance of our independent registered public accounting firm for each fiscal year and approves the audit and non-audit services to be provided by

such firm. The Audit Committee also reviews the scope and the results of the work of the independent registered public accounting firm and reviews the adequacy of internal control over financial reporting. The functions and responsibilities of the Audit Committee are further described in the "Audit Committee Report."

Compensation Committee

The members of the Compensation Committee are Messrs. Hassan, Kindler, and Turley. Mr. Turley is the chair of the Compensation Committee. During 2022, the Compensation Committee met 5 times. The Compensation Committee's responsibilities include, among others:

- developing and maintaining an executive compensation policy and monitoring the results of that policy;
- considering the impact of our compensation policy and practices on our risk profile;
- recommending to the Board for approval compensation and benefit plans;
- reviewing and approving annually corporate and personal goals and objectives to serve as the basis
 for the CEO's compensation, evaluating the CEO's performance in light of those goals and objectives
 and determining the CEO's compensation based on that evaluation;
- determining and approving annual compensation for other executive officers;
- approving grants of equity-based incentives to the extent provided under the our equity
 compensation plans, subject to the Committee's authority to delegate the power to grant awards to
 employees or non-executive service providers who are not directors or executive officers;
- reviewing and making recommendations to the Board regarding the compensation of non-employee directors, including the Executive Chairman;
- reviewing and discussing with management the "Compensation Discussion and Analysis" to the extent required by SEC rules;
- preparing the Compensation Committee report when required by SEC rules;
- reviewing any executive employment-related agreements, proposed severance or retirement arrangements, or change and control or similar agreements, and any amendments or waivers to any such agreements;
- overseeing the development, implementation and effectiveness of the Company's human capital management policies, programs and initiatives, including with respect to recruiting, retaining and developing our employees;
- overseeing the succession planning process with respect to the Chief Executive Officer and other key
 executive officers; and
- reviewing and recommending to the Board for approval our approach with respect to the advisory vote on executive compensation, or say-on-pay, and the frequency of the say-on-pay advisory vote.

The Compensation Committee charter specifies that each member must be a "non-employee director" for purposes of Rule 16b-3 of the Exchange Act. The Board has determined that the members of this Committee are "independent directors" (as defined under the applicable Nasdaq and NYSE listing standards and our Corporate Governance Guidelines as discussed above under "Corporate Governance — Board Standards of Independence") and "non-employee directors" (within the meaning of Rule 16b-3 of the Exchange Act). In addition, the current members of this Committee have been members of other public company boards of directors, are current or former executive officers of public companies, or have or have had comparable positions.

The processes and procedures followed by the Compensation Committee in considering and determining executive compensation, including the role of the outside compensation consultant, are described below under "Compensation Discussion and Analysis — The Compensation Review Process."

Nominating and Governance Committee

The members of the Nominating and Governance Committee are Mr. Alvarez, Ms. Gupta, and Mr. Shapiro. Mr. Alvarez is the chair of the Nominating and Governance Committee. During 2022, the Nominating and Governance Committee met one time. The Nominating and Governance Committee's responsibilities include, among others:

- considering and reviewing periodically the desired composition of the Board, including such factors as diversity of backgrounds and expertise and tenure, and ensuring that the Board is composed so as to satisfy SEC listing requirements and Nasdaq rules, including the independence of directors and the financial and accounting experience of directors;
- establishing and reviewing qualifications and standards for individual directors in the context of the current composition of the Board, the Company's operating requirements, and the long-term interests of our shareholders, and periodically reviewing these qualifications and standards;
- · identifying, nominating, and evaluating candidates for election to the Board;
- making recommendations to the Board regarding the size of the Board, the tenure and classifications
 of directors, and the composition of the Board's committees;
- reviewing and evaluating our various governance policies and guidelines, including pertinent ESG matters;
- · reviewing committee structure and effectiveness; and
- · considering other corporate governance and related matters as requested by the Board.

The Board has determined that all members of the Nominating and Governance Committee are "independent" within the meaning of the listing standards of Nasdaq and NYSE and the independence standards set by the Board as discussed above in "Corporate Governance — Board Standards of Independence."

Director Candidate Recommendations by Shareholders

The Nominating and Governance Committee's charter provides that the Committee will consider director candidate recommendations by shareholders. Shareholder recommendations for candidates to be nominees will be evaluated under the same standards as potential nominees recommended by management or the non-management members of the Board. Shareholders should submit any such director recommendations to the Nominating and Governance Committee through the method described in our Bylaws. The Nominating and Governance Committee did not receive any recommendations from any shareholders in connection with the 2023 Annual Meeting.

Nominating and Governance Committee Process for Identifying and Evaluating Director Candidates

The Nominating and Governance Committee identifies and evaluates all director candidates in accordance with the director qualification standards described in the Corporate Governance Guidelines. The Committee evaluates a candidate's qualifications to serve as a member of the Board based on the background, diversity, and expertise in relevant industries of individual Board members as well as the background and expertise of the Board as a whole. Nominees will be required to bring the skills, talents, knowledge, and expertise to ensure that the composition, structure, and operation of the Board serve the best interests of our shareholders. In addition, the Committee will evaluate a candidate's independence and his or her background and expertise in the context of the Board's needs.

Our Corporate Governance Guidelines and Nominating and Governance Committee charter provides that we will consider diversity, including diversity of backgrounds, in considering the composition of and evaluating nominees to the Board. Both our Corporate Governance Guidelines and the Nominating and Governance Committee charter specifically provide that diversity includes diversity of viewpoints, experience, race, ethnicity, gender and age.

Racial or ethnic minorities and women currently comprise 44% of our directors nominees, based on director self-identification. Specifically, women comprise 22% of our director nominees and racial and

ethnic minorities comprise 44% of our director nominees. However, we have no formal requirement regarding Board diversity. Our priority in selection of Board members is identification of members who will further the interests of our shareholders through their established records of professional accomplishment, the ability to contribute positively to the collaborative culture among Board members, knowledge of our business, and understanding of the competitive landscape of the industries in which we operate. We will consider, in identifying first-time candidates, assessing nominees for director (including incumbent directors), or evaluating individuals recommended by shareholders, the current composition of the Board in light of the diverse communities and geographies we serve and the interplay of the candidate's or nominee's diverse individual experience, education, skills, background, and other qualities and attributes with those of the other Board members. The Nominating and Governance Committee and Board monitor the Board's effectiveness through the Board's self-evaluation process. As described under "Nominees for Election as Directors," the Nominating and Governance Committee and the Board believe that the current composition of the Board reflects a group of highly talented individuals with diverse backgrounds, skills, professional, and industry experience, and other personal qualities and attributes best suited to perform oversight responsibilities for us and our shareholders.

Code of Business Conduct and Ethics

We have adopted a written code of business conduct and ethics (the "Code of Conduct") that applies to our directors, officers, and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, and persons performing similar functions. The Code of Conduct covers a broad range of professional conduct, including employment policies, conflicts of interest, intellectual property, and the protection of confidential information, as well as adherence to all laws and regulations applicable to the conduct of our business.

A copy of the Code of Conduct is available on our website at http://investors.precigen.com under the caption "Governance." If we make any substantive amendments to, or grant any waivers from, the Code of Conduct for any officer or director, we intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K by disclosing the nature of such amendment or waiver on our website.

Political Contributions

In general, it is not our practice to make financial or in-kind political contributions with corporate assets, even when permitted by applicable law.

Communications with the Board

We have established a policy pursuant to which shareholders wishing to communicate with the Board as a group, the Lead Independent Director or individual directors may do so by writing to the following address: Precigen, Inc., 20374 Seneca Meadows Parkway, Germantown, Maryland 20876; Attn: Corporate Secretary.

The communication must prominently display the legend "BOARD COMMUNICATION" in order to indicate to the Corporate Secretary that it is a communication for the Board. Upon receiving such a communication, the Corporate Secretary will promptly forward the communication to the relevant individual or group to which it is addressed. The Board has requested that certain items that are unrelated to the Board's duties and responsibilities be excluded, such as spam, junk mail and mass mailings, resumes, and other forms of job inquiries, surveys, and business solicitations or advertisements.

The Corporate Secretary will not forward any communication determined in his or her good faith belief to be frivolous, unduly hostile, threatening, illegal, or similarly unsuitable. Each communication subject to this policy that was not forwarded because it was determined by the Corporate Secretary to be frivolous is retained for a reasonable period of time in our files and made available at the request of any member of the Board to whom such communication was addressed.

BENEFICIAL OWNERSHIP OF COMMON STOCK

The following table sets forth information regarding beneficial ownership of our share capital as of March 31, 2023 by (i) each of our directors, (ii) each of our named executive officers, (iii) all of our directors and executive officers as a group, and (iv) each person, or group of affiliated persons, known by us to beneficially own more than 5% of our shares of common stock.

The percentage ownership information is based on an aggregate 255,482,753 shares of common stock outstanding as of March 31, 2023.

Except as otherwise noted below, the address for each person or entity listed in the table is c/o Precigen, Inc., 20374 Seneca Meadows Parkway, Germantown, Maryland 20876.

Name of Beneficial Owner	Outstanding Shares Beneficially Owned ⁽¹⁾	Right to Acquire Beneficial Ownership ⁽²⁾	Total Shares Beneficially Owned	Percentage of Shares Beneficially Owned
Directors/director nominees				
RJ Kirk and Affiliates ⁽³⁾	96,160,665	536,226	96,696,891	37.6%
Cesar L. Alvarez	419,390	448,010	867,400	*
Steven Frank	482,358	448,010	930,368	*
Vinita Gupta ⁽⁴⁾	301,730	438,805	740,535	*
Fred Hassan	308,597	454,025	762,622	*
Jeffrey B. Kindler	334,961	448,009	782,970	*
Dean J. Mitchell	331,836	448,010	779,846	*
Robert B. Shapiro ⁽⁵⁾	329,656	452,918	782,574	*
James Turley	321,898	486,611	808,509	*
Named executive officers				*
Helen Sabzevari	1,220,786	3,861,850	7,087,382	2.0%
Harry Thomasian Jr.	120,829	95,000	547,644	*
Donald P. Lehr	385,632	470,355	1,025,158	*
Jeffrey Perez	418,768	465,233	1,045,780	*
Rutul R. Shah	92,997	179,051	552,457	*
Current executive officers and directors as a group ⁽⁶⁾	101,230,103	9,232,113	110,462,216	41.7%
Greater than 5% shareholders				
Ares Trading SA ⁽⁷⁾	20,647,152	_	_	8.1%

^{*} Represents beneficial ownership of less than 1% of our outstanding shares of common stock.

⁽¹⁾ Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes sole or shared voting or investment power with respect to shares of our common stock. The information set forth in the table above is not necessarily indicative of beneficial ownership for any other purpose, and the inclusion of any shares deemed beneficially owned in this table does not constitute an admission of beneficial ownership of those shares. Except as otherwise noted, to our knowledge, the persons and entities named in the table above have sole voting and investment power with respect to all of the shares of common stock beneficially owned by them, subject to community property laws, where applicable.

⁽²⁾ Consists of shares of common stock subject to stock options exercisable as of, or within 60 days of, March 31, 2023 and restricted stock units vesting within 60 days of March 31, 2023. Shares of common stock subject to stock options that are exercisable as of, or within 60 days of, March 31, 2023 and restricted stock units vesting within 60 days of March 31, 2023 are deemed to be outstanding and beneficially owned by the person holding the option or the restricted stock unit for the purpose of

- calculating the percentage ownership of that person, but are not deemed outstanding for the purpose of calculating the percentage ownership of any other person.
- (3) Includes shares held by the following entities over which Mr. Kirk (or an entity over which he exercises exclusive control) exercises exclusive control: 490,401 shares held by JPK 2008 LLC, 3,703,398 shares held by JPK 2009 LLC, 1,654,363 shares held by JPK 2012, LLC, 13,520,789 shares held by Kapital Joe, LLC, 453,731 shares held by Kellie L. Banks (2009) Long Term Trust, 1,403 shares held by Lotus Capital (2000) Co., Inc., 489,438 shares held by MGK 2008 LLC, 3,944,437 shares held by MGK 2009 LLC, 1,637,040 shares held by MGK 2011, LLC, 31,337,786 shares held by R.J. Kirk Declaration of Trust, 16,406,828 shares held by Sunset 2020 LLC, 19,711 shares held by Third Security Incentive 2006 LLC, 832,500 shares held by Third Security Incentive 2007, 691,929 shares held by Third Security Incentive 2009, 1,384,408 shares held by Third Security Incentive 2010 LLC, 118,266 shares held by Third Security Senior Staff 2006 LLC, 4,995,000 shares held by Third Security Senior Staff 2007, 3,223,803 shares held by Third Security Senior Staff 2008 LLC, 1,015,604 shares held by Third Security Senior Staff 2015 LLC, 58,800 shares held by Third Security Senior Staff LLC, 311,287 shares held by Third Security Staff 2001 LLC, 59,133 shares held by Third Security Staff 2006 LLC, 2,497,500 shares held by Third Security Staff 2007, 1,383,858 shares held by Third Security Staff 2009, 1,839,946 shares held by Third Security Staff 2010 LLC, 1,015,626 shares held by Third Security Staff 2015 LLC, 578,079 shares held by ZSK 2008 LLC, and 351,120 shares held by ZSK 2009 LLC, 1,000,000 shares held by Parkview 2020. Also includes 1,144,481 shares held by Alana D. Czypinski, Mr. Kirk's spouse.
- (4) Includes 3,000 shares held in the Sharma-Gupta Marital Property Trust, an affiliate of Vinita Gupta.
- (5) Includes 82,966 shares held in the Robert B. Shapiro Revocable Trust, an affiliate of Robert Shapiro.
- (6) Consists of 14 persons as of March 31, 2023.
- (7) Information is based on the Schedule 13G that was filed with the SEC on January 27, 2023 by Ares Trading SA ("Ares Trading") and certain other information known to us. Ares Trading is a dominantly controlled subsidiary of Merck Serono S.A., Coinsins, Switzerland, an affiliate of Merck KGaA, Darmstadt, Germany. Merck Serono S.A., Coinsins, Switzerland is a wholly owned indirect subsidiary of Merck KGaA, Darmstadt, Germany. Merck Serono S.A., Coinsins, Switzerland and Merck KGaA, Darmstadt, Germany may be deemed to possess sole voting and dispositive power with respect to the securities held of record by Ares Trading. The address of Ares Trading is Zone Industrielle de l'Outriettaz, 1170 Aubonne, Switzerland.

No Delinquent Section 16(a) Reports

Section 16(a) of the Exchange Act requires our executive officers, directors, and persons who own more than 10% of our equity securities, to file reports of ownership and changes in ownership with the SEC and provide us with copies of such reports. Based solely on a review of the copies of these reports furnished to us, we believe that all such filing requirements applicable to such officers and directors and greater than 10% shareholders were complied with during 2022.

PROPOSAL 1 ELECTION OF DIRECTORS

Background

Upon the recommendation of the Nominating and Governance Committee, the Board has unanimously nominated nine incumbent directors, all of whom were elected by our shareholders at our 2022 Annual Meeting of Shareholders, for election to the Board at the Annual Meeting and to hold office until their successors have been elected and qualified or until their earlier resignation or removal. Each nominee has consented to being named as such and to serve as a director if elected. Mr. Shapiro has not been nominated for reelection, and will be retiring at the Annual Meeting.

Our Bylaws provide that, in uncontested director elections (i.e., an election where the number of nominees is not greater than the number of directors to be elected), a nominee for director will be elected to the Board if the votes cast for such nominee's election exceed the votes cast against such nominee's election. However, directors will be elected by a plurality of the votes cast at any meeting of the shareholders for which (i) the Corporate Secretary receives a notice that a shareholder has nominated a person for election to the Board in compliance with the advance notice requirements for shareholder nominees for director set forth in the Bylaws and (ii) such nomination has not been withdrawn by such shareholder on or prior to the 10th day preceding the date we first mail the notice of meeting for such meeting to the shareholders (i.e., if there is a contested director election). If directors are to be elected by a plurality of the votes cast, the shareholders may withhold votes, but will not be permitted to vote against a nominee.

Our Corporate Governance Guidelines provide that any nominee for director in an uncontested election who receives a greater number of shareholder votes cast "against" his or her election than votes "for" his or her election must, promptly following certification of the shareholder vote, tender his or her resignation to the Board for consideration. The Nominating and Governance Committee will then evaluate the best interests of the Company and will recommend to the Board whether to accept or reject the tendered resignation. Following the Board's receipt of this recommendation and determination as to whether to accept the resignation, we will disclose the Board's decision and an explanation of how the decision was reached.

There were no nominee recommendations from shareholders or from any group of shareholders submitted in accordance with our Bylaws. Proxies solicited by the Board will be voted in favor of the nominees listed below unless otherwise specified in the proxy. We know of no reason why the nominees would not be available for election or, if elected, would be unable to serve. While we do not anticipate that any of the nominees will be unable to serve, if any should be unable to serve, the proxy holders reserve the right to substitute another person designated by the Board or the Board may reduce its size.

Vote Required and Board Recommendation

Each director nominee must receive the affirmative vote of a majority of the votes cast in order to be elected. As this proposal is not considered a "routine item," your bank, broker, or other nominee cannot vote your shares without receiving your voting instructions. Abstentions and broker non-votes will not count "for" or "against" the election of any nominee.

THE BOARD UNANIMOUSLY RECOMMENDS THAT SHAREHOLDERS VOTE "FOR" ALL OF THE PROPOSED DIRECTOR NOMINEES.

Nominees for Election as Directors

Set forth below is information for each nominee concerning the individual's age, principal occupation, employment and directorships during the past five years, positions with the Company, the year in which he or she first joined the Board, and his or her term of office as a director. Also set forth below is a brief discussion of the specific experience, qualifications, attributes, or skills that led to the Board's conclusion that, in light of our business and structure, each nominee should serve as a director.

Randal Kirk

Executive Chairman of the Board Director since 2008 Age 69

Business Experience During Past Five Years and Other Affiliations

Mr. Kirk has served as Executive Chairman of the Board since January 2020 and previously served as Chairman of the Board from February 2008 until December 31, 2019 and as our CEO from April 2009 until December 31, 2019. Mr. Kirk provides a wealth of strategic, operational, and management experience. Mr. Kirk currently serves as Chairman and Senior Managing Director of Third Security, LLC, an investment management firm founded by Mr. Kirk in March 1999. Additionally, Mr. Kirk founded and became Chairman of the Board of New River Pharmaceuticals Inc. (a biopharmaceutical company previously traded on Nasdaq prior to its acquisition by Shire plc in 2007) in 1996, and was President and CEO between October 2001 and April 2007.

Since May 2015, Mr. Kirk has served as a member of the board of directors of the Edward Via College of Osteopathic Medicine. Previously, Mr. Kirk served as a member of the board of directors of Scios, Inc. (previously traded on Nasdag prior to its acquisition by Johnson & Johnson) between February 2000 and May 2002, as a member of the board of directors of Halozyme Therapeutics, Inc. (Nasdaq: HALO), a clinical-stage biotechnology company, from May 2007 to May 2018, as a member of the board of directors of ZIOPHARM Oncology, Inc. (Nasdaq: ZIOP), a biotechnology company, from January 2011 to October 2018, and as a member of the board of directors of Clinical Data, Inc. (previously traded on Nasdaq prior to its acquisition by Forest Laboratories, Inc. in April 2011) from September 2002 to April 2011, and was Chairman of the board of directors from December 2004 to April 2011.

Mr. Kirk served on the board of visitors of Radford University from July 2003 to June 2009, was Rector of the board of directors from September 2006 to September 2008 and served on the board of directors of the Radford University Foundation, Inc. from September 1998 to May 2011. He served on the board of visitors of the University of Virginia and Affiliated Schools from July 2009 to October 2012, on the Virginia Advisory Council on Revenue Estimates from July 2006 to October 2012 and on the Governor's Economic Development and Jobs Creation Commission from April 2010 to October 2012. Mr. Kirk received a B.A. in Business from Radford University and a J.D. from the University of Virginia.

We believe that Mr. Kirk's business experience, including his extensive business experience as CEO of multiple companies, his experience as an investor, his service on committees of academic institutions and other public company boards, combined with his business acumen and judgment, provides the Board with valuable strategic and operational expertise and

leadership skills.

Cesar Alvarez

Director since 2008 Chair of Nominating and Governance Committee Age 75

Mr. Alvarez has served as a Board member since 2008. Mr. Alvarez has been the Senior Chairman of the international law firm of Greenberg Traurig, LLP since 2012. He previously served as the law firm's Executive Chairman, and as its Chief Executive Officer from 1997 to 2012. During his tenure as Chief Executive Officer and Executive Chairman, Mr. Alvarez led the firm to become one of the top ten law firms in the United States by leading its growth from 325 lawyers in eight offices to approximately 1,850 attorneys and government professionals in more than 36 locations in the United States, Europe, Asia, and Latin America. Mr. Alvarez also serves as Vice-Chairman of the board of directors of Watsco, Inc. (NYSE: WSO), a

Business Experience During Past Five Years and Other Affiliations

distributor of air conditioning, heating and refrigeration equipment and related parts and supplies; and a director of The St. Joe Company (NYSE: JOE), a real estate development company. Mr. Alvarez served on the board of directors of Fairholme Funds, Inc., a family of publicly traded focused investment funds from May 2008 to February 2020 and Sears Holding Corporation, a retail company, from January 2013 to May 2017. Mr. Alvarez served on the board of directors of Mednax, Inc. (NYSE: MD), a provider of physician services, including newborn, maternal fetal, pediatric subspecialties, and anesthesia care from March 1997 to July 2020. Mr. Alvarez holds a Bachelor of Science, a Master of Business Administration, and a Juris Doctor from the University of Florida.

We believe Mr. Alvarez's qualifications to serve on the Board include his experience as Chief Executive Officer, Executive Chairman, and Senior Chairman of one of the nation's largest law firms with approximately \$2 billion in revenues with 2,200 law professionals providing services in 42 locations across the country and abroad, as well as his many years of corporate experience, both advising clients in the fields of corporate and securities and serving on the boards of directors of publicly traded and private companies.

Steven FrankDirector since 2008
Age 63

Mr. Frank has served as a Board member since February 2008. Mr. Frank has served as a Director of EXUMA Biotechnology Inc., a clinical-stage biotechnology company, since June 2020. Mr. Frank joined J.P. Morgan Securities LLC, an investment bank, in June 2008 and currently serves as Chairman of Global Healthcare Investment Banking. Mr. Frank had previously been the head of Bear Stearns' Worldwide Health Care Investment Banking group in New York for 16 years and has provided general investment banking services to all types of healthcare companies. Specifically, Mr. Frank has led or played major roles in hundreds of mergers and acquisitions and financing transactions across the spectrum of deal structures. He has specialized in transactions involving pharmaceutical, medical device, and biotechnology companies. Prior to joining Bear Stearns in 1993, Mr. Frank served for over ten years as an institutional investor, primarily at State Farm Insurance Company, where he focused on a multibillion-dollar life-sciences portfolio. Mr. Frank holds a B.S. from Illinois State University and an M.B.A. from the University of Chicago.

Mr. Frank also has been on the Executive Board of Frost Museum of Science since June 2020.

We believe Mr. Frank's extensive knowledge of our industry and of finance and capital structure strengthen the Board's collective qualifications, skills, and experience.

Vinita Gupta

Director since 2017 Member of Nominating and Governance Committee Age 55 Ms. Gupta has served as a Board member since April 2017. Since September 2012, Ms. Gupta has served as the chief executive officer of Lupin Limited ("Lupin"). Lupin, headquartered in Mumbai, India, is an innovation led global pharmaceutical company developing and delivering a wide range of branded and generic formulations, biotechnology products and APIs. Ms. Gupta has served as a director of Lupin since 2001 and serves on its Risk Management Committee. In addition, Ms. Gupta has served as the Chief Executive Officer and chairperson of Lupin Pharmaceuticals, Inc., the U.S. wholly owned subsidiary of Lupin, since 2003. Ms. Gupta served as director on the board of Lupin's Japanese

Business Experience During Past Five Years and Other Affiliations

subsidiary Kyowa Pharmaceuticals from 2007 until the sale of that business in 2019. Ms. Gupta has held various positions at Lupin since joining the company in 1993. In 2017, Ms. Gupta also became a member of the Global Advisory Board at the Kellogg School of Management at Northwestern University.

Ms. Gupta was named 2015 Ernst & Young Entrepreneur of the Year and won the 2016 Forbes India Leadership Awards — Entrepreneur of the Year. Ms. Gupta is regularly named in Forbes Asia Top 50 Power Business women listings for Asia Pacific. Ms. Gupta graduated from the University of Mumbai with a degree in pharmacy and received her MBA from the Kellogg School of Management at Northwestern University.

We believe Ms. Gupta's qualifications to serve on our board of directors include her strong leadership and management experience within the pharmaceutical industry, including serving as the chief executive officer of a global pharmaceutical corporation and her significant knowledge of operations, strategy, government relations, regulatory, finance and investments and mergers and acquisitions, including the fact that she was not only responsible for setting up Lupin's business in the U.S. and Europe but was instrumental in formulating and executing strategies that have helped Lupin emerge as a global pharmaceutical corporation.

Fred Hassan

Director since 2016 Member of Compensation and Human Capital Management Committee Age 77 Mr. Hassan has served as a Board member since June 2016. Mr. Hassan joined Warburg Pincus LLC, a global private equity investment institution, in 2010 and currently serves as Director. Previously, Mr. Hassan served as Chairman and Chief Executive Officer of Schering-Plough from 2003 to 2009. Before assuming these roles, from 2001 to 2003, Mr. Hassan was Chairman and Chief Executive Officer of Pharmacia Corporation, a company formed as a result of the merger of Monsanto Company and Pharmacia & Upjohn, Inc. He joined Pharmacia & Upjohn, Inc. as Chief Executive Officer in 1997. Mr. Hassan previously held leadership positions with Wyeth serving as Executive Vice President, and was a member of the board from 1995 to 1997. Earlier in his career, he spent a significant tenure with Sandoz Pharmaceuticals and headed the company's U.S. pharmaceuticals business.

Mr. Hassan has been a director of BridgeBio Pharma, Inc. (Nasdaq: BBIO) since August 2021 and a director of Prometheus Biosciences, Inc. (Nasdaq: RXDX) since May 2021. Mr. Hassan served as a director of Time Warner Inc. from October 2009 to June 2018 and a director of Amgen, Inc. (Nasdaq: AMGN) since July 2015. In the course of his career, he has held numerous directorships, including those at Avon Products, Inc. from 1999 to 2013, Bausch & Lomb from 2010 until its acquisition by Valeant Pharmaceuticals International, Inc. (NYSE: VRX) ("Valeant") in 2013, and Valeant from 2013 to 2014.

Mr. Hassan has chaired notable pharmaceutical industry organizations including The Pharmaceutical Research and Manufacturers of America (PhRMA) and The International Federation of Pharmaceutical Manufacturers Associations (IFPMA). Mr. Hassan received a B.S. degree in chemical engineering from the Imperial College of Science and Technology at the University of London and an M.B.A. from Harvard Business School.

Business Experience During Past Five Years and Other Affiliations

We believe Mr. Hassan's qualifications to serve on the Board include his strong leadership and management experience within our industry, including significant knowledge of operations, strategy, government relations, regulatory, finance and investments, and mergers and acquisitions

Jeffrey Kindler Mr. Kindler has served as a Board member since November 2011. He is the Chief Executive Officer of Centrexion Therapeutics, a privately held clinical stage biopharmaceutical company, since October 2013; an Operating Partner at Artis Ventures, a leading venture capital firm, since April 2020; and a Senior Advisor at Blackstone, one of the world's leading investment firms, since August 2020. Mr. Kindler was Chief Executive Officer and Chairman of the Board of Pfizer, Inc. (NYSE: PFE), a pharmaceutical company, from 2006 until his retirement in December 2010. He joined Pfizer in 2002 as Executive Vice President and General Counsel and assumed positions of

> In addition to serving on Precigen's Board, Mr. Kindler currently serves on the boards of Terns Pharmaceuticals, Inc. (Nasdaq: TERN), a clinical-stage biopharmaceutical company, and Perrigo Company plc (NYSE; TASE: PRGO), a healthcare company. Mr. Kindler previously served on the board of vTv Therapeutics Inc., a publicly-traded biotechnology company, from July 2015 to December 2020, PPD, Inc. from March 2012 until its acquisition by Thermo Fisher Scientific, Inc. in December 2021, and SIGA Technologies, Inc., a publicly-traded pharmaceutical company, from March 2013 to June 2020. Mr. Kindler received a B.A. from Tufts University and a J.D. from Harvard Law School.

> increasing responsibility until being named Chief Executive Officer in 2006.

We believe Mr. Kindler brings leadership, extensive business, operating, legal and policy, and corporate strategy experience to the Board, along with tremendous knowledge of several of the industries in which we operate as well as the fundamentals of our business.

Mr. Mitchell has served as a Board member since March 2009. In July 2013, Mr. Mitchell was appointed Executive Chairman and board member of Covis Pharma Holdings S.a.r.l., a private specialty pharmaceutical company, which was sold in March 2020 to Apollo Capital. In 2020, he joined the boards of Kinnate Biopharma Inc. (Nasdaq: KNTE) and Praxis Precision Medicines Inc. (Nasdag: PRAX), in both cases as Chairman. Since 2012, he has served as a non-executive board member of ImmunoGen, Inc. (Nasdag: IMGN), a public oncology company, and since July 2014 he has served as a board member of Theravance Biopharma, Inc. (Nasdaq: TBPH), a public specialty pharmaceutical company.

Previously, Mr. Mitchell served as Chairman of PaxVax Inc., a biopharmaceutical company, from October 2016 to October 2018. Prior to that, he was President and Chief Executive Officer and a board member of Lux Biosciences, Inc., a privately held ophthalmology company, from July 2010 until June 2013. Prior to that, he was President and Chief Executive Officer of Alpharma Inc., a global specialty pharmaceutical company, and also was appointed a member of its board of directors in July 2006. Alpharma Inc. was acquired by King Pharmaceuticals, Inc. in December 2008, and Mr. Mitchell ceased to be an officer and a director of Alpharma Inc. in December 2008. Prior to this, he was President and Chief

Director since 2011 Chair of Audit Committee Member of Compensation and Human Capital Management Committee Age 67

Dean Mitchell

Director since 2009 Member of Audit Committee Age 67

Business Experience During Past Five Years and Other Affiliations

Executive Officer of Guilford Pharmaceuticals Inc., a public company, from December 2004 until its acquisition by MGI Pharma Inc., a public biopharmaceutical company focused in oncology and acute care, in October 2005, and was a non-executive director of MGI Pharma Inc. until its acquisition by Eisai Co., Ltd. in January 2008. Mr. Mitchell was at Bristol-Myers Squibb, a public company, from 2001 until 2004 in several key leadership roles including President International, President U.S. Primary Care and Vice President, Strategy. He also spent 15 years at Glaxo SmithKline, a public company, and its predecessor companies, most recently as Senior Vice President, Clinical Development and Product Strategy from 1999 to 2001, and prior to that as Vice President and General Manager, Specialty Divisions, Strategic Planning and Business Development, from 1995 to 1999. Mr. Mitchell received an M.B.A. from City University Business School, in London, U.K., and a B.Sc. degree in biology from Coventry University, U.K.

We believe Mr. Mitchell brings to the Board extensive experience in the pharmaceutical industry, specifically in the areas of management, business and corporate development, sales and marketing, and clinical development as well as his significant experience serving on boards of directors of companies in our industry.

Helen Sabzevari Director since 2020 Age 61 Dr. Sabzevari has served as Board member since June 2020, as our President and Chief Executive Officer since January 2020, and as President of PGEN Therapeutics, Inc., our wholly owned subsidiary, since December 2017. Dr. Sabzevari also has served as a board member of Kinnate Biopharma Inc. (Nasdaq: KNTE) since June 2021. From July 2017 to December 2017, Dr. Sabzevari served as our Senior Vice President, Health Therapeutics as well as Head of Research and Development. Prior to joining the Company, from 2015 to 2017, Dr. Sabzevari co-founded and served as Chief Scientific Officer of Compass Therapeutics LLC, a fully integrated drug discovery and development company focused on manipulating the immune system to treat human disease. From 2008 to 2014, Dr. Sabzevari served as Senior Vice President of Immuno-Oncology as well as Global Head of Immunotherapy, Oncology, Global Research and Early Development at EMD Serono (a subsidiary of Merck KGaA, Darmstadt, Germany). From 1998 to 2008, Dr. Sabzevari led the Molecular Immunology Group at the Laboratory of Tumor Immunology and Biology at the US National Cancer Institute, where she was focused on design, development, and delivery of novel vaccines and immunotherapies for a range of human cancers. Dr. Sabzevari received her doctorate degree in cell and molecular immunology and completed her postdoctoral work at the department of immunology at the Scripps Research Institute, working on various immunotherapeutic modalities in the treatment of cancer and autoimmune diseases.

We believe Dr. Sabzevari brings to the Board expertise in research and development of immunotherapy-based therapeutics, experience translating novel treatments from preclinical stage into the clinic, and extensive leadership experience and knowledge of the industry.

James Turley

Director since 2014 Lead Independent Director Chair of Compensation and Human Capital Management Committee Age 67

Business Experience During Past Five Years and Other Affiliations

Mr. Turley has served as a Board member since April 2014. Mr. Turley also serves on the board of directors of Citigroup Inc. (NYSE: C), a leading global bank, Emerson Electric Co. (NYSE: EMR), a global leader in bringing technology and engineering together to provide innovative solutions for customers in industrial, commercial, and consumer markets around the world, since July 2013, and Northrop Grumman Corporation (NYSE: NOC), a leading global security company providing innovative systems, products and solutions to government and commercial customers worldwide, since April 2015. Mr. Turley previously served as the Chairman and Chief Executive Officer of Ernst & Young LLP ("Ernst & Young") from 2001 until his retirement in June 2013. From 1994 to 2001, Mr. Turley served as Regional Managing Partner of Ernst & Young.

Mr. Turley is also a board member of the Boy Scouts of America, a board member of Kohler Co. (a privately held company) since April 2016 and St. Louis Trust & Family Office (a privately-held company) since April 2019. He is also a board member of the MUNY Theatre of St. Louis and Forest Park Forever. Mr. Turley holds an undergraduate degree and a master's degree in accounting from Rice University.

We believe Mr. Turley's extensive management experience as the former Chairman and Chief Executive Officer of one of the world's largest accounting firms, his accounting and financial expertise, and his experience in serving on the boards of directors of publicly traded companies make him well qualified to serve on the Board. Having served as Chair and CEO of Ernst & Young, Mr. Turley developed significant expertise in the areas of compensation, litigation, corporate affairs, and corporate governance. Mr. Turley also possesses extensive knowledge and expertise in the areas of financial reporting, business, and risk management.

BOARD DIVERSITY MATRIX

The following matrix is provided in accordance with applicable Nasdaq listing requirements:

Board Diversity Matrix (as of April 25, 2023)

Total Number of Directors	10	
	<u>Female</u>	Male
Part I: Gender Identity:		
Directors	2	8
Part II: Demographic Background:		
Asian	1	1
Hispanic or Latinx	_	1
Middle Eastern	1	_
White	_	6

DIRECTOR COMPENSATION

Non-Employee Director Compensation

The compensation of our non-employee directors is established by the Compensation Committee and the Board. This compensation is periodically reviewed by the Compensation Committee based on market practice information provided by our outside compensation consultant, to ensure continued alignment with company goals and shareholder interest. Under our non-employee director compensation policy adopted in December 2017, our non-employee directors received in 2022 the compensation set forth in the table below. We also reimburse our non-employee directors for reasonable out-of-pocket expenses incurred in connection with attending Board and committee meetings.

Element of Compensation	Compensation Amount
Annual Retainer for Board Chair ⁽¹⁾	\$100,000
Annual Retainer for Other Board Members ⁽¹⁾	\$50,000
Committee Chair Additional Retainer ⁽¹⁾	\$12,500
Committee Member Additional Retainer ⁽¹⁾	\$6,500
Annual Equity Awards	Options with a value of \$125,000 ⁽²⁾
	RSUs with a value of \$125,000 ⁽³⁾
Initial Appointment Equity Awards	Options with a value of \$180,000 ⁽⁴⁾
	RSUs with a value of \$180,000 ⁽⁵⁾

- (1) Non-employee directors have the option to receive shares of common stock, valued at the fair market value at the time of issuance, in lieu of cash retainers. We do not issue, nor do we pay cash for, fractional shares. Annual retainer fees are payable in advance at the first regularly scheduled meeting of the Board for the calendar year.
- (2) All non-employee directors are entitled to an annual grant of options to purchase shares of common stock (with an exercise price equal to the fair market value on the date of grant), which are granted at the first regularly scheduled meeting of the Board for the calendar year and are fully vested at the time of grant.
- (3) All non-employee directors are entitled to an annual grant of restricted stock units ("RSUs"), which are granted at the first regularly scheduled meeting of the Board for the calendar year and vest in full on the one year anniversary of the date of the grant, subject to continued Board service.
- (4) Any newly appointed non-employee director receives, upon appointment, a one-time grant of options to purchase shares of common stock (with an exercise price equal to the fair market value on the date of grant), with one quarter of such options vesting each year on the anniversary of appointment to the Board, subject to continued Board service.
- (5) Any newly appointed non-employee director receives, upon appointment, a one-time grant of RSUs, which vest in full on the one year anniversary of appointment to the Board, subject to continued Board service.

DIRECTOR COMPENSATION TABLE FOR 2022

The following table discloses all compensation provided to the non-employee directors for the most recently completed fiscal year ended December 31, 2022:

Name ⁽¹⁾	Fees Earned or Paid in Cash ⁽²⁾ (\$)	Stock Awards ⁽³⁾⁽⁵⁾ (\$)	Option Awards ⁽⁴⁾⁽⁵⁾ (\$)	Total (\$)
Randal Kirk	99,999	250,000	250,000	599,999
Cesar Alvarez	62,497	125,000	125,000	312,497
Steven Frank	49,999	125,000	125,000	299,999
Vinita Gupta	56,499	125,000	125,000	306,499
Fred Hassan	56,499	125,000	125,000	306,499
Jeffrey Kindler	68,997	125,000	125,000	318,997
Dean Mitchell	56,499	125,000	125,000	306,499
Robert Shapiro	62,998	125,000	125,000	312,998
James Turley	62,497	125,000	125,000	312,497

⁽¹⁾ Dr. Sabzevari, our CEO, is a named executive officer and therefore the compensation she received is shown in the Summary Compensation Table and not included in this table. Dr. Sabzevari is an employee of the Company and receives no compensation for her service as a director.

(2) Our directors may elect to receive any portion of their annual retainer fees in shares of our common stock instead of cash. During 2022, each of our directors elected to receive all annual retainer fees in shares of our common stock. The following table provides the number of shares of our common stock received in lieu of the cash retainer by each non-employee director for 2022:

Name	Shares of Common Stock Received (#)
Randal Kirk	12,970
Cesar Alvarez	8,106
Steven Frank	6,485
Vinita Gupta	7,328
Fred Hassan	7,328
Jeffrey Kindler	8,949
Dean Mitchell	7,328
Robert Shapiro	8,171
James Turley	8,106

- (3) Represents the aggregate grant date fair market value of the annual grant of RSUs, computed in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718 ("ASC Topic 718").
- (4) Represents the aggregate grant date fair market value of the annual grant of stock options, computed in accordance with ASC Topic 718, based on the closing price of our common stock on the date of grant. For a full description of the assumptions we use in computing this amount, see Note 2 to our consolidated financial statements for the year ended December 31, 2022, which is included in our 2022 Annual Report.

Mr. Kirk, our Executive Chairman, is a non-employee member of the Board.

(5) The following table provides information regarding the aggregate outstanding equity awards held by each non-employee director as of December 31, 2022:

Name	RSUs Outstanding (#)	Stock Options Outstanding (#)
Randal Kirk	126,595	285,248
Cesar Alvarez	61,576	322,521
Steven Frank	61,576	322,521
Vinita Gupta	61,576	313,316
Fred Hassan	61,576	328,536
Jeffrey Kindler	61,576	322,520
Dean Mitchell	61,576	322,521
Robert Shapiro	61,576	322,520
James Turley	61,576	361,122

Equity Ownership Guidelines for Board of Directors

The Board believes that directors should hold meaningful equity ownership positions in the Company to help align the interests of directors with those of shareholders. Under our stock ownership guidelines for directors, non-employee directors are expected to be beneficial owners of shares of our common stock with a market value equivalent to at least five times the amount of annual cash retainer fees (not including any additional retainer for service as Lead Independent Director or a Committee Chair, and as adjusted from time to time). Non-employee directors have five years to satisfy the ownership requirement, which is measured from the later of June 2018 (when the current requirement was adopted) or the date of appointment for newly appointed non-employee directors. Compliance with the requirement is measured on an annual basis each year using the closing price of our common stock as of December 31st. As of December 31, 2022, each of our non-employee directors was either in satisfaction of the ownership requirement, or on track to satisfy the ownership requirement within the five-year period.

For purposes of the equity ownership guidelines described above, a non-employee director's shareholdings include, in addition to shares held outright, any stock underlying vested but unexercised stock options assuming the stock options have been "net exercised." Stock underlying RSUs or other equity awards that remain unvested will not count towards the requirement, regardless of whether the award is time- or performance-based.

Until a non-employee director has met our equity ownership guidelines, he or she is expected to hold 100% of any stock acquired through exercise of a stock option or vesting and settlement of restricted stock units, net of shares sold to cover the cost of acquisition and any applicable tax obligation. In addition, non-employee directors must further hold all net shares for a minimum of one year following exercise, in the case of stock options, or vesting, in the case of RSUs or other equity awards.

PROPOSAL 2 RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Background

After consideration of the firm's qualifications and past performance, the Board, through the Audit Committee, has appointed Deloitte & Touche LLP ("Deloitte") as our independent registered public accounting firm for the fiscal year ending December 31, 2023.

Deloitte was initially engaged as our independent registered public accounting firm for the fiscal year ended December 31, 2019. The Audit Committee has again selected Deloitte as our independent registered accounting firm for the year ending December 31, 2023 and believes that the retention of Deloitte for the 2023 fiscal year is in the best interest of us and our shareholders.

Under the Sarbanes-Oxley Act of 2002 and the rules of the SEC promulgated thereunder, the Audit Committee is solely responsible for the selection, appointment, compensation, and oversight of the work of our independent registered public accounting firm. Although submission of the appointment of an independent registered public accounting firm to shareholders for ratification is not required by law, the Board considers the appointment of our independent registered public accounting firm to be an important matter of shareholder concern and is submitting the appointment of Deloitte for ratification by our shareholders, as a matter of good corporate practice. One or more representatives of Deloitte are expected to be present at the Annual Meeting with the opportunity to make a statement if they so desire and to be available to respond to appropriate questions.

Although ratification is not required by applicable laws, our bylaws or otherwise, the Board is submitting the selection of Deloitte to our stockholders for ratification because we value your views on our independent registered public accounting firm. The Audit Committee intends to carefully consider the results of the vote. If the stockholders do not ratify the appointment of Deloitte, the Audit Committee will reconsider Deloitte's selection. Even if the selection is ratified, the Audit Committee, in its discretion, may select a different independent registered public accounting firm at any time during the year if the committee determines that such a change would be in the best interests of the Company and our stockholders.

Required Vote and Board Recommendation

The affirmative vote of a majority of the votes cast on the matter is required for the approval of this item. As this proposal is considered a "routine item," your bank, broker, or other nominee may vote your shares "for" the proposal without receiving your voting instructions. Abstentions will not count either in favor of or against the proposal.

THE BOARD UNANIMOUSLY RECOMMENDS THAT SHAREHOLDERS VOTE "FOR" THE RATIFICATION OF THE APPOINTMENT OF DELOITTE & TOUCHE LLP.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Principal Accountant Fees

The following table summarizes the aggregate fees billed by Deloitte for the fiscal year ended December 31, 2022 and, for comparison purposes, the aggregate fees billed by Deloitte for the fiscal year ended December 31, 2021. The Audit Committee approved all of the services described below.

		Fiscal Year Ended December 31,	
	2022	2021	
Audit Fees	\$1,380,000	\$1,731,700	
Audit-Related Fees	185,000	_	
Tax Fees	155,915	234,084	
All Other Fees	_	_	
Total Fees	\$1,748,615	\$1,965,784	

Audit Fees

Audit fees include professional services rendered by our independent auditors for the audit of our annual financial statements, including the reviews of the financial statements included in our quarterly reports on Form 10-Q. This category also includes fees for assistance with complex accounting transactions, fees for audits provided in connection with subsidiaries and statutory filings or services that generally only the principal auditor can reasonably provide to a client, and consents and assistance with and review of documents filed with the SEC.

Audit-Related Fees

Audit-related fees consist of, among other things, provision of consents and comfort letters.

Tax Fees

Tax fees include original and amended tax returns, studies supporting tax return amounts as may be required by Internal Revenue Service regulations, claims for refunds, assistance with tax audits and other work directly affecting or supporting the payment of taxes, planning, research, and advice supporting our efforts to maximize the tax efficiency of our operations.

All Other Fees

All other fees are fees for products or services other than those in the above three categories. In fiscal years 2022 and 2021, our independent auditors did not provide any services other than those described above.

Pre-Approval Policy

The Audit Committee has adopted a written policy for the provision of audit services and permitted non-audit services by our independent registered public accounting firm. Our Chief Financial Officer has primary responsibility to the Audit Committee for administration and enforcement of this policy and for reporting non-compliance. Under the policy, the Audit Committee receives a presentation of an annual plan for audit services and for any proposed audit-related, tax, or other non-audit services to be performed by the independent registered public accounting firm, but management may, from time to time, seek approval of certain additional audit or non-audit services not provided for in the budget. Rule 2-01 of Regulation S-X provides an exception to the requirement for pre-approval of non-audit services for *de minimis* amounts under certain circumstances. Our policy does not include the *de minimis* exception, and during fiscal years 2022 and 2021, no non-audit services were performed pursuant to the *de minimis* exception.

AUDIT COMMITTEE REPORT

In accordance with the Audit Committee Charter, the Audit Committee assists the Board in fulfilling its responsibility for oversight of the integrity of our accounting, auditing, and financial reporting practices. During the fiscal year ended December 31, 2022, the Audit Committee met 4 times.

The Audit Committee reviewed and discussed our audited financial statements as of and for the year ended December 31, 2022 with management and Deloitte. Management has the responsibility for the preparation of our financial statements and Deloitte has the responsibility for the audit of those statements. Based on the above-mentioned review and discussions with management and Deloitte, the Audit Committee recommended to the Board that our audited financial statements be included in its Annual Report on Form 10-K for the fiscal year ended December 31, 2022, for filing with the SEC.

In addition, the Audit Committee reviewed and discussed the interim financial information contained in our Quarterly Reports on Form 10-Q with our Chief Executive Officer, our Chief Financial Officer, our Chief Legal Officer, and the independent registered public accounting firm prior to public release.

In discharging its oversight responsibility as to the audit process, the Audit Committee has received the written disclosures and the letter from Deloitte required under the applicable requirements of the Public Company Accounting Oversight Board ("PCAOB") regarding Deloitte's communications with the Audit Committee concerning independence, and has discussed with our independent registered public accounting firm its independence. The Audit Committee also discussed with management the quality and adequacy of our internal controls. The Audit Committee reviewed with Deloitte their audit plans, audit scope, and identification of audit risks.

The Audit Committee members are not professional accountants or auditors, and their functions are not intended to duplicate or to certify the activities of management or our independent registered public accounting firm. The Audit Committee oversees our financial reporting process on behalf of the Board. Our management has primary responsibility for the financial statements and reporting process, including our internal control over financial reporting. Deloitte is responsible for performing an integrated audit of our financial statements and internal control over financial reporting in accordance with the auditing standards of the PCAOB.

The Audit Committee reviewed and discussed with Deloitte the matters required to be discussed by the applicable requirements of the PCAOB and the SEC, and, with and without management present, discussed and reviewed the results of Deloitte's audit of the financial statements. The Audit Committee also considered, as it determined appropriate, tax matters, and other areas of financial reporting and the audit process over which the Audit Committee has oversight.

In connection with the evaluation, appointment, and retention of the independent registered public accounting firm, the Audit Committee annually reviews the qualifications, performance, and independence of the independent registered public accounting firm, and lead engagement partner, and assures the regular rotation of the lead engagement partner as required. In doing so, the Audit Committee considers a number of factors including, but not limited to: quality of services provided; technical expertise and knowledge of the industry; effective communication; and objectivity. The Audit Committee also considers whether the non-audit services provided by Deloitte are compatible with maintaining Deloitte's independence. The Audit Committee reappointed Deloitte, subject to shareholder ratification, as our independent registered public accounting firm for the fiscal year ending December 31, 2023.

The Audit Committee

Jeffrey Kindler, Chair Dean Mitchell Robert Shapiro

PROPOSAL 3 NON-BINDING PROPOSAL TO APPROVE THE COMPENSATION OF THE NAMED EXECUTIVE OFFICERS

General

The Board has determined to provide our shareholders the opportunity to vote each year to approve, on an advisory basis, the compensation of our named executive officers, as disclosed in this Proxy Statement. The compensation of our named executive officers is described in the Compensation Discussion and Analysis, the compensation tables and the accompanying narratives herein.

The Compensation Committee designs our executive compensation program to attract, motivate, and retain executive officers who are critical to our success. Under these programs, our named executive officers are rewarded for the achievement of our near-term and longer-term financial and strategic goals and for driving corporate financial performance and stability. The programs contain elements of cash and equity-based compensation and are designed to align the interests of our executives with those of our shareholders.

Our compensation program reflects competition and reasonable practices in the marketplace. The mix of compensation components is competitive with that of other companies of similar size and operational characteristics, links compensation to individual and corporate performance and encourages stock ownership by senior management. The Compensation Committee continues to review, with the assistance of its independent compensation consultant, our executive compensation program with a focus on continued alignment with market practice and tying executive pay to long-term shareholder value creation. Based on its review of the total compensation of our named executive officers for 2022, the Compensation Committee believes that the total compensation for each of the named executive officers is reasonable and effectively achieves the objective of aligning compensation with the achievement of our financial goals and creation of shareholder value without encouraging our named executive officers to take unnecessary or excessive risks.

The Compensation Discussion and Analysis section of this Proxy Statement and the accompanying tables and narrative provide a comprehensive review of our named executive officer compensation objectives, program, and rationale. We urge you to read this disclosure before voting on this proposal.

Pursuant to Section 14A of the Exchange Act, the Board is requesting shareholders approve an advisory vote on the following resolution:

"RESOLVED, that our shareholders approve, on a non-binding advisory basis, the compensation of the named executive officers as disclosed in the Proxy Statement for the 2023 Annual Meeting of Shareholders pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the Compensation Discussion and Analysis, the Summary Compensation Table, the other related tables and the accompanying narrative."

As an advisory vote, your vote on this proposal will be non-binding on the Board. However, the Board values the opinions that our shareholders express in their votes and will consider the outcome of the vote when making future executive compensation decisions as it deems appropriate.

We seek shareholder approval of our executive compensation on an annual basis. The next opportunity for our shareholders to approve on a non-binding basis the compensation of our named executive officers will be at our 2024 Annual Meeting.

Vote Required and Board Recommendation

The affirmative vote of a majority of the votes cast on the matter is required for the approval of this item. As this proposal is not considered a "routine item," your bank, broker, or other nominee cannot vote your shares without receiving your voting instructions. Abstentions and broker non-votes will not count either in favor of or against the proposal.

THE BOARD UNANIMOUSLY RECOMMENDS THAT SHAREHOLDERS VOTE TO APPROVE THE NON-BINDING ADVISORY PROPOSAL APPROVING THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS.

IDENTIFICATION OF EXECUTIVE OFFICERS

Set forth below is information regarding the position, age, and business experience of each of our executive officers.

Helen Sabzevari, Ph.D., age 61, Chief Executive Officer. For more information about Dr. Sabzevari, please see her biography under "Nominees for Election as Directors."

Harry Thomasian Jr., age 61, Chief Financial Officer. Mr. Thomasian has served as our Chief Financial Officer since October 2021. Mr. Thomasian has over 35 years of international business experience in the areas of accounting, corporate financings and advisory services. Prior to joining Precigen, he was with Ernst & Young LLP ("EY"), one of the world's largest global professional services firms, since 1986. Mr. Thomasian most recently served as a senior client service partner, the Baltimore office Growth Markets Leader and was the co-leader for the Firm's life sciences practice for the Chesapeake Region. He was previously a senior partner in EY's Capital Markets Center in Tokyo, Japan, and has held various other global, regional and local leadership positions with EY. In addition, Mr. Thomasian has significant experience as a member of Boards of Directors (including chairing various committees) for a number of notfor-profit institutions. Mr. Thomasian earned a B.S. in accountancy from Bentley University. He also completed EY's executive education program in strategic leadership at Northwestern University's Kellogg School. Mr. Thomasian is a Certified Public Accountant.

Donald P. Lehr, age 48, Chief Legal Officer. Mr. Lehr has served as our Chief Legal Officer since 2011. From 2009 to 2011 he served as our Associate General Counsel. Mr. Lehr has broad experience in the areas of corporate, securities, and general business law. Prior to joining us, he practiced law with the law firm of Hogan Lovells US LLP (formerly Hogan & Hartson, LLP) in Baltimore, Maryland from 2002 to 2009. While at Hogan Lovells, his practice included the representation of privately and publicly held corporations across many industries, including biotechnology, pharmaceuticals, healthcare, software, technology, and manufacturing. Prior to his time at Hogan Lovells, Mr. Lehr served as a judicial clerk for the Honorable Irma S. Raker of the Court of Appeals of Maryland. Mr. Lehr received a B.A. from Swarthmore College and received a J.D. from the University of Maryland School of Law.

Jeffrey Perez, age 51, Senior Vice President, Intellectual Property Affairs. Mr. Perez has served as our Senior Vice President, Intellectual Property Affairs since August 2014. Until April 20, 2020 Mr. Perez served as a member of the board of directors of AquaBounty Technologies Inc., a public biotechnology company (Nasdaq: AQB) that was our majority-owned subsidiary until October 2019. Before joining Precigen, Mr. Perez was Managing Director and Associate General Counsel and Intellectual Property at Third Security, LLC, where he evaluated potential investments of Third Security's managed investment funds. Additionally, Mr. Perez worked with Third Security portfolio companies in evaluating and developing their intellectual property strategies and general corporate activities. Prior to joining Third Security, Mr. Perez practiced intellectual property law with the law firm of Hunton & Williams LLP in Washington D.C. Mr. Perez's previous work involved client consultation, litigation, agreement work, opinion drafting, and patent procurement. Mr. Perez received a B.S. from Cornell University and his J.D. from George Mason University School of Law.

Rutul R. Shah, age 42, Chief Operating Officer. Mr. Shah has served as our Chief Operating Officer since October 1, 2022. From February 16, 2020 to October 1, 2022 Mr. Shah served as our Vice President & Head of Operations. From April 1, 2016 through February 15, 2020 Mr. Shah served as our Senior Director of Operations. From September 4, 2014 through March 31, 2016, Mr. Shah served as a Program Leader in our Human Therapeutics Division. Mr. Shah has broad experience in alliance management, portfolio management, program and project management and operations. Mr. Shah graduated with a BE degree in Chemical Engineering from Gujarat University in India and MS degree in Bioengineering from the University of Illinois, Chicago.

COMPENSATION DISCUSSION AND ANALYSIS

The Compensation Committee oversees our executive compensation programs. In this role, the Compensation Committee reviews and approves all compensation decisions relating to our named executive officers, or NEOs. To assist with its duties, the Compensation Committee has engaged an independent compensation consultant to provide competitive compensation data and assist with the analysis and implementation of various aspects of our executive compensation decisions. See "— The Compensation Review Process" below for a discussion of the role of the compensation consultants engaged by the Compensation Committee in 2022.

This section discusses the principles underlying our executive compensation programs, policies, and decisions and explains the process the Compensation Committee uses to determine compensation and benefits for our named executive officers. It also provides qualitative information regarding the manner and context in which compensation is earned by and awarded to our named executive officers and is intended to place in perspective the data presented in the tables and narrative that follow.

The discussion and analysis of our compensation program for our named executive officers should be read in conjunction with the tables and text elsewhere in this Proxy Statement that describe the compensation awarded to, earned by or paid to our named executive officers.

The individuals who served as our principal executive officer and principal financial officer during 2022, as well as the other individuals included in the Summary Compensation Table, are referred to throughout this Proxy Statement as the "named executive officers" and, to the extent they remain employed by us, together with the other executives of management, as the "executive officers."

Accordingly, our named executive officers for 2022 are:

Name	Position
Helen Sabzevari, Ph.D.	President and Chief Executive Officer
Harry Thomasian Jr.	Chief Financial Officer
Donald P. Lehr	Chief Legal Officer
Jeffrey Perez	Senior Vice President, Intellectual Property Affairs
Rutul R. Shah ⁽¹⁾	Chief Operating Officer

⁽¹⁾ Mr. Shah was appointed as the Company's Chief Operating Officer effective as of October 1, 2022.

Executive Summary

Our goal for our executive compensation is to provide a comprehensive package that is sufficient to attract, motivate, and retain executives of outstanding ability, performance, and potential. The Compensation Committee seeks to establish and maintain an appropriate relationship between executive compensation and the creation of shareholder value. The Compensation Committee believes that the most effective compensation program is one that provides competitive base pay, rewards the achievement of established annual and long-term goals and objectives, and provides incentives for retention.

The Compensation Committee assists the Board in fulfilling its oversight responsibilities with respect to the compensation of our executive officers. The Compensation Committee is responsible for:

- establishing and administering the base salaries and annual incentive awards of our executive officers, and
- administering and making recommendations and awards under our equity incentive plans.

The Compensation Committee regularly reviews the compensation paid to our executive officers to ensure it is fair, reasonable, and competitive and is substantially tied to our performance. The Compensation Committee evaluates, both subjectively and objectively, our financial performance, competitive position, future potential, and the individual and group performance of the members of executive management. In such evaluation, the Compensation Committee reviews data prepared by management and employs the

business experience of the individual members of the Compensation Committee. The Compensation Committee also utilizes the assistance of an independent compensation consultant, as described below under "— The Compensation Review Process."

2022 was another transformational year for the Company. We made significant clinical progress across our principal pipeline, including UltraCAR-T and AdenoVerse; we completed the sale of a non-healthcare business, Trans Ova Genetics and implemented additional organizational steps to continue the Company's focus as a healthcare company; and we strengthened the Company's balance sheet through the early retirement of a portion of our convertible notes. For 2022, after taking into account the overall position of the Company and with a focus on retention and cash preservation, the Compensation Committee, with the assistance of its independent compensation consultant in assessing the competitive market and evaluating current executive pay practices, made adjustments to the existing base salaries for certain of our executive officers and made annual short-term incentive awards, consisting of a mixture of cash and equity, based on the Company's performance. In addition, we awarded long-term incentive awards to our executive officers in the form of stock options to promote retention, increase long-term equity ownership and align executive and long-term shareholder interests by linking a portion of their compensation to changes in the Company's stock price.

Key Compensation Corporate Governance Practices

The Compensation Committee and the Board regularly review evolving practices in executive compensation and corporate governance. We have adopted certain policies and practices that we believe are consistent with industry best practices, as tailored to our specific business model and strategic direction. We have also strived to adopt policies that will foster our growth and the continual realization of value to our shareholders by encouraging appropriate risk taking and entrepreneurship in support of our unique and dynamic business model. The Compensation Committee and the Board also actively scrutinize the anticipated effect of compensation practices on our ultimate goals.

What We Do:

- The Compensation Committee has 100% independent directors.
- We conduct an annual review and assessment of potential and existing risks arising from our compensation programs and policies.
- The Compensation Committee engages an independent compensation consultant to advise on executive and director compensation matters.
- We tie our annual cash bonus opportunities to corporate objectives.
- We use equity awards that vest over time and deliver greater value as our stock price increases.
- We maintain stock ownership guidelines for our non-employee directors.

What We Do Not Do:

- · We do not allow hedging of Company stock.
- We do not provide excessive perquisites.
- We do not provide for tax gross-ups, except for *de minimis* amounts related to short-term and long-term disability insurance premiums.
- We do not allow repricing of stock options without shareholder approval.
- · We do not offer guaranteed bonuses.

Our Compensation Philosophy

Our compensation philosophy is guided by the principle of pay-for-performance. Our compensation programs are designed to support our business goals by rewarding achievement of short-term and progress towards long-term objectives in a manner that links compensation of our executive officers with the value

created for our shareholders. While aligning our executive officers' compensation with our short-term and long-term business goals, we aim to provide the incentives needed to attract, motivate, reward, and retain our management talent, which is crucial to our long-term success.

Principles of Our Compensation Framework

Our executive compensation program is designed to attract, retain, motivate, and reward talented individuals who will execute our business plan so that we can succeed in the competitive and highly volatile business environment in which we operate. The Compensation Committee believes that the compensation program for our executive officers should reward the achievement of our short-term and long-term objectives and that compensation should be related to the value created for our shareholders. Furthermore, the compensation program should reflect competition and best practices in the marketplace. The following objectives serve as the Compensation Committee's guiding principles for all compensation decisions:

- Our executive compensation and benefits should attract, motivate, reward, and retain the management talent necessary to achieve our business objectives at compensation levels that are fair, equitable, and competitive with those of comparable companies.
- Compensation should be set based on the leadership of each executive officer, which reflects skill sets, experience, and achievement, to create a competitive framework for talent acquisition and retention.
- Compensation should be linked to individual and corporate performance by aligning our executive compensation program to company-wide performance, which is assessed in terms of financial and non-financial performance and creation of long-term value for our shareholders.
- There should be an appropriate mix and weighting compensation elements such that an adequate amount of each executive officer's total compensation is performance-based or "at risk." Further, as an executive's responsibilities increase, the portion of "at-risk" compensation for the executive should also increase as a percentage of total compensation.

In addition, the Compensation Committee believes that the various elements of our compensation program effectively align compensation with performance measures that are directly related to our financial goals and creation of shareholder value without encouraging executives to take unnecessary and excessive risks.

Developments in Executive Compensation for 2022

We review our executive compensation practices annually to ensure that our plans and practices are supportive of our goals, remain competitive, and are in keeping with the best interests of our shareholders. In 2022, the Company continued a strategic process through which it focused its operations on its healthcare programs. As part of this process, the Board appointed Mr. Rutul R. Shah to serve as the Company's Chief Operating Officer, effective as of October 1, 2022. Mr. Shah provides broad leadership experience and expertise in alliance management, portfolio management, program and project management and the Company's operations. As more fully described below, Mr. Shah received an annual salary increase to \$410,000 in connection with his appointment.

In addition, the Compensation Committee continues to work closely with Aon Consulting ("Aon"), its independent compensation consultant, to implement enhancements to the Company's compensation programs that further promote the Company's pay for performance philosophy and drive long-term shareholder value creation.

Elements of Our Compensation Program

The Compensation Committee utilizes a mix of compensation components, with the intent to make each component of total direct compensation competitive while also linking compensation to individual and corporate performance and encouraging stock ownership by our executive officers. The table below describes each compensatory element in our program and briefly explains how it promotes our objectives. We believe the combination of these elements provides an appropriate balance of rewards, incentives, and

benefits to our executives and enables us to meet our desired compensation objectives, strengthen our ability to attract and retain highly qualified individuals, and to appropriately link pay to performance.

Element of Compensation	Description	How This Element Promotes Our Objectives		
Annual Compensation				
Base Salary	Fixed annual compensation that is certain in payment and provides continuous income.	Aids in both recruitment and retention; designed to be competitive in the marketplace.		
Annual Short-Term Incentive Awards	Performance-based compensation for achieving goals and objectives.	Motivates and rewards achievement of annual corporate objectives by providing at-risk comprehensive pay opportunities linked to performance.		
Long-Term Compensation				
Long-Term Equity Incentive Awards	Generally, grants of options and/or RSUs that are part of our long-term incentive program; time-based vesting, generally over four years.	Promotes retention, increases long- term equity ownership, and aligns executive and long-term shareholder interests by linking a portion of their compensation to changes in company stock price.		
Other Compensation				
Post-Termination Payments and Benefits	Contractual payments and benefits for certain executives upon termination of employment in specified circumstances, such as termination other than for cause or for good reason, as described in greater detail herein.	Provides assurance of financial security, which is desirable in lateral recruiting and executive retention and permits objective evaluation by executives of potential changes to our strategy and structure.		
Other Benefits	Executives participate in employee benefit plans generally available to our employees.	1 1 0		

We do not provide our executives with any meaningful perquisites that are not provided to employees generally. We also do not have any deferred compensation programs or retirement programs other than our 401(k) Plan that is generally available to all employees. We enroll all eligible employees in the same health, dental, and life and disability insurance programs.

Base Salary

General

Base salary levels for our executive officers, with the exception of our CEO, are recommended to the Compensation Committee by our CEO and are subject to approval by the Compensation Committee and the Board. In setting the base salary level for each executive officer (other than our CEO), the Compensation Committee generally considers the executive officer's experience level, demonstrated capabilities, time and placement in position, our geographic region, individual performance, and potential future contributions to our Company. In addition, the Compensation Committee may consider executive compensation data for the industry as a whole, including data from similarly situated companies. Base salaries are reviewed annually by the Compensation Committee. When making decisions to adjust executive salaries, the Compensation Committee will also consider our overall financial performance in addition to the factors identified above. No particular weight is assigned to any one factor. Taking into account the overall position of the Company, the Compensation Committee determined not to make any changes to base salary for our named executive officers in 2022.

The following table sets forth the 2022 annualized base salaries for each of our NEOs. In connection with his appointment as the Chief Operating Officer, the Board approved an increase to Mr. Shah's annual base salary to \$410,000. No other changes were made to Mr. Shah's compensation arrangements.

Name	2022 Base Salary
Dr. Helen Sabzevari	\$1,000,000
Harry Thomasian Jr.	\$ 475,000
Donald Lehr	\$ 575,000
Jeffrey Perez	\$ 500,000
Rutul R. Shah	\$ 410,000

Annual Short-Term Incentive Awards

General

Our NEOs are eligible to receive annual bonuses based on corporate performance achievement, as determined by the Compensation Committee following the completion of the applicable performance year, and subject to the NEO's continued employment through the applicable payment date. Each named executive officer is provided an annual target bonus opportunity that is set as a percentage of base salary, except that Dr. Sabzevari's employment agreement provides for eligibility for an annual bonus of between 75% and 150% of Dr. Sabzevari's annual base salary.

For 2022, the Compensation Committee established a bonus program for our named executive officers based on the achievement of a combination of primarily operational performance goals, which would promote the achievement of our key clinical, non-clinical, business development and other corporate objectives. The Compensation Committee established a target bonus for Dr. Sabzevari of 150% of base salary and for our other NEOs of 40% of base salary.

Following the end of the 2022 performance year, the Compensation Committee carefully reviewed the performance of the Company against each of the goals as part of the evaluation process for determining the annual bonus payouts for our named executive officers. In conducting the review, the Compensation Committee closely analyzed the achievement against each performance target, taking into account the specific objectives, quantitative metrics and qualitative factors associated with each goal.

The Compensation Committee discussed these accomplishments with Dr. Sabzevari and, subsequently, with members of the Board and the Compensation Committee's independent compensation consultant, recommended to the Board the approval of a performance bonus in an aggregate amount equal to 72.5% of target, or 108.75% of Dr. Sabzevari's base salary and 29% of base salary for our other NEOs. The Compensation Committee also approved the short-term incentive bonuses to be paid 25% in cash and 75% in RSUs based on the grant date fair market value of the Company's shares, with the value of any partial shares paid in cash as reflected in the table below. The RSUs were granted on March 24, 2023, of which one-third of the RSUs vested immediately upon the grant date and the remaining RSUs will vest in four equal installments on each of August 2, 2023, August 9, 2023, August 16, 2023 and August 23, 2023.

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Name	Annual Target Bonus (% of Base Salary)	Total Value of Target Bonus (\$)	Achievement Percentage of Target (%)	Actual Cash Payment (\$)	RSUs Granted (#)	Total Value of Actual Bonus (\$)
Dr. Helen Sabzevari	150%	\$1,500,000	72.5%	\$271,875	849,519	\$1,087,500
Harry Thomasian Jr.	40%	\$ 190,000	72.5%	\$ 34,437	8,109	\$ 137,749
Donald P. Lehr	40%	\$ 230,000	72.5%	\$ 41,687	26,102	\$ 166,748
Jeffrey Perez	40%	\$ 200,000	72.5%	\$ 36,250	22,697	\$ 144,999
Rutul R. Shah	40%	\$ 164,000	72.5%	\$ 29,725	26,102	\$ 118,899

The Compensation Committee also approved additional stock options grants to our NEOs in connection with its 2022 performance review. The Compensation Committee took into consideration the Company's

continued focus on cash preservation (thus utilizing RSUs as the form of payment for short-term incentive bonuses), the delayed vesting of a substantial portion of the annual bonus for each NEO and the need to provide continued leadership incentives, and determined that each of our NEOs should be awarded an additional bonus in the form of stock options, with a value equal to 25% of each named executive officer's actual bonus amount for 2022. Accordingly, the following grants of stock options were made to each of Dr. Sabzevari, Messrs. Thomasian, Lehr, Perez and Shah on March 24, 2023. 100% of the stock options will vest one year after the grant date, subject to each NEO's continued employment through such date.

Name	Additional Stock Options Granted (#)	Total Grant Date Value (\$)
Dr. Helen Sabzevari	369,596	\$271,875
Harry Thomasian Jr.	46,815	\$ 34,437
Donald Lehr	56,671	\$ 41,687
Jeffrey Perez	49,279	\$ 36,250
Rutul R. Shah	40,409	\$ 29,725

Long-Term Equity Incentive Awards

Our primary objectives in granting long-term equity incentive awards are to encourage significant ownership of our common stock by management and to provide long-term financial incentives linked directly to our long-term performance. The Compensation Committee believes that significant ownership of our common stock by senior management helps to align the interests of management and the shareholders. After taking into account the overall position of the Company during the business transitions made during the year, the Compensation Committee made grants of long-term incentive awards to its executives for 2022 as noted below.

In early 2022, the Compensation Committee approved grants of stock options to Dr. Sabzevari and Messrs. Thomasian, Lehr and Perez, each of which vests in equal annual installments over four years from the grant date. In addition, Mr. Shah received a grant of stock options in early 2022 in his capacity as a non-executive employee of the Company, which vests in equal annual installments over four years from the grant date. Mr. Shah did not receive any additional grants in 2022 in connection with his appointment as an executive officer in October 2022.

Although we do not currently have a formal policy with respect to the grant of equity incentive awards to our executive officers, or any formal equity ownership guidelines applicable to them, we believe that equity grants provide our executives with a strong link to our long-term performance, create an ownership culture, and help to align the ownership interests of our executives and our shareholders. The Compensation Committee continues to work closely with its independent compensation consultant to review and evaluate the Company's approach to long-term equity incentive compensation for its executive officers in a manner that promotes long-term shareholder interests. The Compensation Committee believes that broad and significant employee ownership of our common stock effectively motivates the building of shareholder wealth.

With the exception of significant promotions and new hires, equity grants, when awarded, have generally been awarded toward the beginning of the fiscal year. The Compensation Committee selects this timing because it enables us to consider our prior year performance and the participants' and our expectations for the next performance period.

Other Benefits

The Compensation Committee believes employee benefits are an essential component of our competitive total compensation package. These benefits are designed to attract and retain our employees. The executive officers may participate in, and we make contributions on their behalf to, the same benefit plans that are provided to all of our eligible employees, which include medical, health and dental insurance, long-term disability insurance, accidental death and disability insurance, and our 401(k) Plan. As part of the 401(k) Plan, we generally match 100% of the first 3% of compensation contributed by the employee into the 401(k) Plan

subject to the Internal Revenue Code of 1986, as amended (the "Code"), and our 401(k) Plan limits. We have disclosed all company matches for our named executive officers in the column labeled "All Other Compensation," in the Summary Compensation Table herein, and separately disclosed each amount in the All Other Compensation Table for 2022 herein.

The Compensation Review Process

Process for Approval of Compensation Measures

Management makes a recommendation to the Compensation Committee and the Board regarding key financial goals, operational goals, and performance measures that will guide us for the relevant fiscal year. The Compensation Committee, together with the Board, reviews these recommendations and modifies them as the Board deems appropriate and the revised goals and performance objectives become the compensation measures for the executive officers. For 2023, the Compensation Committee is committed to continually reviewing and refining the Company's executive compensation programs, with a focus on ensuring alignment with the company's overall strategy and shareholder interests and enhancing and promoting its pay for performance philosophy.

Role of the Compensation Committee and Management

Governance of our compensation program is the responsibility of the Compensation Committee, which consists solely of independent directors. At the direction of the Compensation Committee, our CEO prepares compensation recommendations regarding the compensation of each of our executive officers, other than for the CEO, and presents those recommendations to the Compensation Committee for approval. The Compensation Committee evaluates the overall performance of the executive officers based on our achievement of corporate performance objectives and goals. The Compensation Committee, with the advice of its independent compensation advisor, then reviews and takes into account all elements of executive compensation in setting policies and determining compensation amounts. The Compensation Committee does not delegate authority to its outside advisor or to other parties.

Role of Compensation Consultants

As discussed above, the Compensation Committee is authorized to retain experts, consultants, and other advisors to aid in the discharge of its duties.

Since June 2021, the Compensation Committee has engaged Aon as its independent compensation consultant to aid the Compensation Committee in its annual review of the Company's executive compensation practices for continuing appropriateness and reasonableness and to make recommendations regarding executive officer compensation levels and structures. In reviewing the Company's executive compensation practices, the Compensation Committee also considers other sources to evaluate external market, industry and peer-company practices. Aon has no other business relationship with us and receives no payments from us other than fees for services to the Compensation Committee.

In retaining Aon, the Compensation Committee separately considered the six factors set forth in Section 10C-1(b)(4)(i) through (vi) of the Exchange Act and the listing standards of Nasdaq, based on such consideration, determined that the engagement of Aon did not raise any conflicts of interest.

Use of Peer Group

In and prior to 2021, we did not undertake any formal peer group analysis of executive compensation or target compensation to specific benchmarks against any peer group companies because, due to the unique and rapidly evolving nature of our business, no practical robust cohort of peer companies was available to use as a formal peer group for our Company.

However, in June 2021, the Compensation Committee engaged Aon to assist in the analysis of the Company's peer group to align with governance and market best practices in preparation for the 2022 compensation review cycle. In that capacity, Aon provided the Compensation Committee with a peer group

analysis and made recommendations to the Compensation Committee in structuring the compensation program for the CEO and other executive officers.

The peer analysis conducted by Aon considered our peer companies to be U.S. based pre-commercial bio/pharma companies predominantly in Phase II/III clinical trials, and companies specializing in oncology, gene therapy, vaccine development and/or a diverse portfolio with one or more of the specialties. The peer group that resulted from this screening method consisted of 22 potential companies as the following:

Company Name								
Agenus (AGEN)	Allogene Therapeutics (ALLO)	Atara Biotherapeutics (ATRA)	Caribou Biosciences, Inc. (CRBU)	CytomX Therapeutics (CTMX)				
Fate Therapeutics (FATE)	Gritstone bio (GRTS)	IDEAYA Biosciences (IDYA)	Inovio Pharmaceuticals (INO)	Iovance Biotherapeutics (IOVA)				
Legend Biotech (LEGN)	Molecular Templates (MTEM)	NGM Biopharmaceuticals (NGM)	Poseida Therapeutics (PSTX)	Precision BioSciences (DTIL)				
REGENXBIO (RGNX)	Revolution Medicines (RVMD)	Sana Biotechnology (SANA)	Sorrento Therapeutics (SRNE)	TCR2 Therapeutics (TCRR)				
VBI Vaccines (VBIV)	Xencor (XNCR)							

At the time the peer group for 2022 was proposed to the Compensation Committee, the peer group had the following median statistics:

Measure	50th Percentile	Precigen's Position
Market Capitalization	\$1.37 billion	\$1.38 billion (50th percentile)
Revenues	\$36.0 million	\$97.9 million (92nd percentile)
Annualized 3-Year TSR	10%	-22% (14th percentile)

In preparation for making 2023 compensation decisions, in March 2023 the Compensation Committee reviewed the existing compensation peer group in consultation with its independent compensation consultant for continued financial and business fit and made the following updates:

The following companies were removed from the peer group:

CytomX Therapeutics (CTMX) Legend Biotech (LEGN) Molecular Templates (MTEM)

The following two companies were added to the peer group:

Lyell Immunopharma (LYEL) Vaccitech (VACC)

The Compensation Committee plans to continue to monitor certain compensation practices at a variety of similarly situated or similarly structured companies in assessing and making compensation decisions going forward.

Establishing Total Direct Remuneration

Total direct remuneration is the sum of base salary, annual short-term incentive awards, long-term equity incentive awards (if any), and other benefits. A major portion of each executive officer's remuneration is established by performance-based incentives, which require achievement of performance objectives and goals as a condition to earning annual short-term incentive awards, and long-term equity incentive awards, the value of which depends on our stock price upon vesting or exercise. The at-risk portion of total direct remuneration provides increased pay for higher levels of corporate and/or business sector performance.

In setting each executive officer's total direct remuneration opportunity, the Compensation Committee takes into account factors such as the responsibilities, experience, performance, contributions, and service of

the executive. We do not set total direct remuneration or the component parts at levels to achieve a mathematically precise market position. In determining executive compensation, the Compensation Committee reviews all components of each executive officer's total compensation, including retirement benefits and the costs of any perquisites received, to ensure such compensation meets the goals of the program. As a part of this review, the Compensation Committee considers corporate performance and the recommendations of senior management. The Compensation Committee also takes into consideration individual and overall company operating performance to ensure executive compensation reflects past performance as well as future potential and, we believe, adequately differentiates among employees, based on the scope and complexity of the employee's job position, individual performance and experience and our ability to pay. The Compensation Committee reviews annually each executive officer's performance prior to considering changes in compensation. The individual performance of each executive officer is evaluated in light of our overall performance approved by the Compensation Committee and the Board. The Compensation Committee and the Board believe that the competitive environment, including for executive talent, is dynamic and evolving. For this reason, while the Compensation Committee believes the total compensation for each of the executive officers is reasonable and appropriate, the Compensation Committee continues to actively consider methods to further improve the effectiveness of our approach to executive compensation.

Consideration of Say-on-Pay Vote Results

The Board has determined to provide our shareholders the opportunity to vote each year to approve, on an advisory basis, the compensation of our named executive officers as disclosed in our Proxy Statement ("say-on-pay"). As an advisory vote, the vote on executive compensation is non-binding on the Board and should not be construed as (i) overruling a decision by the Board, (ii) creating or implying any change to our fiduciary duties, or (iii) creating or implying any additional fiduciary duties for the Board. Although the vote is non-binding, the Board and the Compensation Committee value the opinions of our shareholders, and consider our shareholders' views when making executive compensation decisions, as they deem appropriate.

At our 2022 Annual Meeting of Shareholders, we held a non-binding shareholder say-on-pay vote. Our shareholders approved our 2022 executive compensation proposal, with 78.1% of the shares that were cast on the proposal voted in favor of the say-on-pay resolution. We did not make any significant changes in our policies or programs in response to this vote. However, we will continue to consider the outcome of the say-on-pay vote for future compensation decisions for our executive officers.

Other Executive Compensation Practices

Anti-Hedging Policy

To ensure alignment of the interests of our shareholders, directors and executive officers, our Insider Trading Policy does not permit directors, officers, or employees to engage in short-term or speculative transactions involving our securities, including short sales, publicly traded options, or hedging of our securities.

Compensation Recovery Policies

It is the Board's policy that in the event the Board determines that a significant restatement or correction of our financial results or other metrics is required for the prior fiscal year for which audited financial statements have been completed, and, had the results or metrics been properly calculated initially, our officers would have received less compensation, the Board has the authority to obtain reimbursement of any portion of any performance based compensation paid or awarded, whether cash or equity based, to the officers and to other employees responsible for accounting errors resulting in the restatement or correction that is greater than would have been paid or awarded calculated based upon the restated or corrected financial results or metrics. Further, it is the policy of the Board to seek recoupment in all instances where Section 304 of the Sarbanes-Oxley Act of 2002 requires us to seek recoupment.

In light of the SEC's release of its final clawback rule in October 2022 and Nasdaq's proposed listing standards issued in February 2023 implementing the rule, the Board and management are reviewing the

Company's clawback policy and intend to adopt a compliant updated clawback policy once the proposed Nasdaq listing standard is finalized.

Tax and Accounting Implications

Under Section 162(m) of the Code, compensation paid to each of the Company's "covered employees" that exceeds \$1 million per taxable year is generally non-deductible. To retain highly skilled executives and remain competitive with other employers, the Compensation Committee may authorize compensation that would not be deductible under Section 162(m) of the Code or otherwise if it determines that such compensation is in the best interests of us and our shareholders.

We follow Financial Accounting Standard Board Accounting Standards Codification Topic 718 ("ASC Topic 718") for our stock-based compensation awards. ASC Topic 718 requires companies to estimate and record an expense for each award of equity compensation (including stock options and RSUs) over the vesting period of the award.

COMPENSATION AND HUMAN CAPITAL MANAGEMENT COMMITTEE REPORT

The Compensation and Human Capital Management Committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management and, based on such review and discussion, the Compensation and Human Capital Management Committee recommended to the Board that it be included in this Proxy Statement.

THE COMPENSATION AND HUMAN CAPITAL MANAGEMENT COMMITTEE

- · James S. Turley, Chair
- · Fred Hassan
- · Jeffrey B. Kindler

Compensation Risk Assessment

As part of its oversight of our executive compensation program, the Compensation Committee considers the impact of our executive compensation program, and the incentives created by the compensation awards that it administers, on our risk profile. In addition, the Compensation Committee reviews our compensation policies and procedures, including the incentives that they create and factors that may reduce the likelihood of excessive risk-taking, to determine whether they present a significant risk to us. The Compensation Committee concluded that our compensation programs are designed with the appropriate balance of risk and reward in relation to our overall business strategy and that the balance of compensation elements discourages excessive risk taking. The Compensation Committee, therefore, determined that the risks arising from our compensation policies and practices for employees are not reasonably likely to have a material adverse effect on us. The Compensation Committee will continue to consider compensation risk implications while deliberating the design of our executive compensation programs. In its discussions, the Compensation Committee considered the attributes of our programs, including:

- appropriate pay philosophy in light of our business model;
- balance with respect to the mix of cash and equity compensation, and measures of performance against both annual and multiyear standards;
- long-term incentives linked to stock price performance;
- long-term incentives generally have multiyear vesting to ensure a long-term focus and appropriate balance against short-term goals;
- independent Compensation Committee oversight, with Compensation Committee discretion to reduce incentives based on subjective evaluation of individual performance; and
- · anti-hedging policies.

SUMMARY COMPENSATION TABLE

The following table sets forth the compensation paid to or accrued by our named executive officers during the fiscal years ended December 31, 2022, 2021 and 2020.

Name and Principal Position	Year	Salary (\$)	Bonus ⁽¹⁾ (\$)	Stock Awards ⁽²⁾ (\$)	Option Awards ⁽³⁾ (\$)	Non-Equity Incentive Plan Compensation ⁽⁴⁾ (\$)	All Other Compensation ⁽⁵⁾ (\$)	Total (\$)
Helen Sabzevari	2022	1,000,000	_	750,000	1,459,127	271,875	16,620	3,497,620
Chief Executive Officer	2021	1,000,000	750,002	749,998	_	_	16,170	2,516,168
	2020	1,000,000	750,002	4,115,000	14,529,600	_	15,314	20,409,916
Harry Thomasian Jr. ⁽⁶⁾	2022	454,584	_	17,840	344,540	34,437	35,019	886,420
Chief Financial Officer	2021	91,667	17,842	_	618,750	_	4,415	732,673
Donald P. Lehr	2022	575,000	_	80,498	258,405	41,687	35,712	991,302
Chief Legal Officer	2021	575,000	80,502	201,246	_	_	35,262	892,011
	2020	575,000	201,254	570,000	_	_	31,957	1,378,211
Jeffrey Perez	2022	500,000	_	70,000	258,405	36,250	33,992	898,647
Senior Vice President, IP Affairs	2021	500,000	70,000	174,994	_	_	33,542	778,536
	2020	500,000	175,006	570,000	_	_	30,716	1,275,722
Rutul R. Shah Chief Operating Officer ⁽⁷⁾	2022	327,500	_	55,000	344,540	29,725	36,318	793,083

- (1) Represents discretionary cash bonuses for 2021 and 2020 paid in the year following the applicable year's service period.
- (2) Represents the grant date fair value computed by us for financial reporting purposes, computed in accordance with ASC Topic 718. For a full description of the assumptions we use in computing these amounts, see Note 2 to our consolidated financial statements for the year ended December 31, 2022, which is included in our 2022 Annual Report. This column does not include for 2022 the grant date fair value of RSUs granted as part of the incentive award for performance in 2022 because the awards were granted in 2023. However, it does include for 2022, 2021 and 2020 the grant date fair value of RSUs granted as part of the incentive award for performance in 2021, 2020 and 2019, respectively.
- (3) Represents the grant date fair value computed by us for financial reporting purposes, computed in accordance with ASC Topic 718. For a full description of the assumptions we use in computing these amounts, see Note 2 to our consolidated financial statements for the year ended December 31, 2022, which is included in our 2022 Annual Report. The actual value a named executive officer may receive depends on market prices and there can be no assurance that the amounts reflected in the Option Awards column will actually be realized. No gain to a named executive officer is possible without an appreciation in stock value after the date of grant.
- (4) For 2022, represents the aggregate annual performance-based cash incentive earned under the Company's 2022 annual cash incentive program for executive employees that is paid in cash in the year following the applicable year's service period.
- (5) The amounts in this column are further detailed in the "All Other Compensation Table for 2022."
- (6) Mr. Thomasian commenced his employment with us as Chief Financial Officer on October 18, 2021. Accordingly, no information is displayed for 2020.
- (7) Mr. Shah commenced his employment with us as Chief Operating Officer on October 1, 2022. Accordingly, no information is displayed for 2021 and 2020.

ALL OTHER COMPENSATION TABLE FOR 2022

The table below reflects the types and dollar amounts of perquisites, additional compensation, and other personal benefits provided to the named executive officers during 2022. For purposes of computing the dollar amounts of the items listed below, we used the actual out-of-pocket costs to us of providing the perquisite or other personal benefit to the named executive officer. The named executive officers paid any taxes associated with these benefits without reimbursement from us.

Name	Company-Paid Welfare and Life Benefits Premiums (\$)	401(k) Plan Company Contributions (\$)	Total (\$)
Helen Sabzevari	7,470	9,150	16,620
Harry Thomasian Jr.	25,869	9,150	35,019
Donald P. Lehr	26,562	9,150	35,712
Jeffrey Perez	24,842	9,150	33,992
Rutul R. Shah	27,168	9,150	36,318

GRANTS OF PLAN-BASED AWARDS FOR 2022

The following table presents information regarding grants of plan-based awards to the named executive officers during the fiscal year ended December 31, 2022.

		Estimated Future Payouts Under Non-Equity Incentive Plan Awards ⁽¹⁾		Non-Equity Incentive Plan Awards(1) Shares of		Stock Awards: Number of	All Other Option Awards: Number of Securities Underlying	Exercise or Base Price of Option	Grant Date Fair Value of Stock and Option
Name	Grant Date	Threshold (\$)	Target (\$)	Maximum (\$)	Units (#)	Options (#)	Awards (\$/Share)	Awards (\$) ⁽²⁾	
Helen Sabzevari	2/2/2022					847,000	2.33	1,459,127	
	3/18/2022				340,909 ⁽³⁾	_	_	750,000	
	_	_	1,500,000	_					
Harry Thomasian Jr.	2/2/2022				_	200,000	2.33	344,540	
	3/18/2022				8,109 ⁽³⁾	_	_	17,840	
	_	_	190,000						
Donald P. Lehr	2/2/2022				_	150,000	2.33	258,405	
	3/18/2022				36,590 ⁽³⁾	_	_	80,498	
	_	_	230,000	_					
Jeffrey Perez	2/2/2022				_	150,000	2.33	258,405	
	3/18/2022				31,818 ⁽³⁾	_	_	70,000	
	_	_	200,000	_					
Rutul R. Shah	2/2/2022				_	200,000	2.33	344,540	
	3/18/2022				25,000 ⁽³⁾	_	_	55,000	
	_	_	164,000	_					

⁽¹⁾ Represents the target payout opportunity under the Company's 2022 annual cash incentive program.

⁽²⁾ Represents the grant date fair value of the equity awards determined in accordance with ASC Topic 718.

⁽³⁾ Award was granted for performance in 2021.

OUTSTANDING EQUITY AWARDS AT 2022 FISCAL YEAR END

The following table sets forth specified information concerning unexercised stock options and unvested RSUs held by each of the named executive officers as of December 31, 2022.

			Option Av	Stock Awards			
Name	Grant Date	Number of Securities Underlying Unexercised Options: Exercisable	Number of Securities Underlying Unexercised Options: Unexercisable ⁽¹⁾	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock Not Vested (#) ⁽¹⁾	Market Value of Shares or Units of Stock Not Vested (\$)
Helen Sabzevari	7/17/2017	150,000	_	22.83	7/17/2027	_	_
	1/4/2019	_	_	_	_	3,443	5,233
	1/25/2019	_	_	_	_	14,222	21,617
	1/5/2020	1,000,050	499,950	5.95	1/5/2030	_	_
	1/5/2020	750,000	750,000	11.90	1/5/2030	_	_
	1/5/2020	750,000	750,000	17.85	1/5/2030	_	
	2/2/2022	_	847,000	2.33	2/2/2032	_	_
Harry Thomasian Jr.	10/18/2021	45,000	135,000	4.72	10/18/2031	_	_
	2/2/2022	_	200,000	2.33	2/2/2032	_	_
Donald P. Lehr	3/20/2014	207,855	_	29.56	3/20/2024	_	_
	2/2/2017	225,000	_	20.94	2/2/2027	_	_
	1/4/2019	_	_	_	_	18,939	28,787
	2/2/2022	_	150,000	2.33	2/2/2032	_	_
Jeffrey Perez	8/25/2014	202,733	_	19.52	8/25/2024	_	_
	2/2/2017	225,000	_	20.94	2/2/2027	_	_
	1/4/2019	_	_	_	_	18,939	28,787
	2/2/2022	_	150,000	2.33	2/2/2032	_	_
Rutul R. Shah	9/4/2014	4,944	_	17.34	9/4/2024	_	_
	3/12/2015	2,597	_	45.69	3/12/2025	_	_
	3/10/2016	2,510	_	34.85	3/10/2026	_	_
	3/16/2017	5,000	_	21.38	3/16/2027	_	_
	3/23/2018	4,000	_	15.80	3/23/2028	_	_
	6/18/2019	30,000	10,000	8.60	6/18/2029	_	_
	7/16/2020	30,000	30,000	4.67	7/16/2030	_	_
	4/21/2021	25,000	75,000	8.17	4/21/2031	_	_
	2/2/2022	_	200,000	2.33	2/2/2032	_	_

⁽¹⁾ Each award vests in four equal annual installments beginning on the anniversary of the grant date.

STOCK AWARDS VESTED FOR 2022

The following table sets forth specified information concerning stock vesting for each of the named executive officers during the fiscal year ended December 31, 2022.

	Stock A	N wards
Name	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$) ⁽¹⁾
Helen Sabzevari	340,909	426,136
	9,765	36,228
	14,223	51,629
	3,444	12,502
Harry Thomasian Jr.	8,109	10,380
Donald P. Lehr	36,590	46,835
	9,765	36,228
	18,939	68,749
Jeffrey Perez	31,818	40,727
	9,765	36,228
	18,939	68,749
Rutul R. Shah	25,000	31,250

⁽¹⁾ The amounts in the "Value Realized on Vesting" column are calculated based on the closing market price per share of our common stock on the date of vesting. This calculation differs from the grant date fair value of the equity awards determined in accordance with ASC Topic 718.

POTENTIAL PAYMENTS UPON TERMINATION OR A CHANGE IN CONTROL

Employment Agreements with Named Executive Officers

Messrs. Lehr and Perez are each party to an employment agreement with the Company entered into in April 2019 that provide for certain severance rights upon termination without "Cause" (as defined in the applicable employment agreement) or resignation by the executive officer for "Good Reason" (as defined in the applicable employment agreement). Pursuant to the terms of these employment agreements, subject to the execution of a release of claims, the named executive officer would be entitled to receive (i) payment equivalent to 18 months of his base pay, and (ii) the named executive officer's expected cost of COBRA premiums for continued medical coverage for up to 18 months.

Neither Mr. Thomasian's nor Mr. Shah's employment arrangements provide for any termination payments or benefits.

Employment Agreement with Dr. Sabzevari

In connection with her appointment to the position of President and CEO in January 2020, we entered into an employment agreement with Dr. Sabzevari (the "CEO Employment Agreement"). The term under the CEO Employment Agreement commenced on January 1, 2020 and continues until terminated in accordance with the CEO Employment Agreement.

Dr. Sabzevari's initial annual base salary under the CEO Employment Agreement is \$1,000,000. Dr. Sabzevari received sign-on equity grants in connection with her commencement of employment with us. The CEO Employment Agreement also provides for eligibility for an annual bonus of between 75% and 150% of Dr. Sabzevari's annual base salary, contingent upon continuous employment by us and Dr. Sabzevari's performance during the bonus period and through the date on which the bonus is paid, as determined in the sole discretion of the Board. Pursuant to the CEO Employment Agreement, Dr. Sabzevari will be entitled to participate in all employee benefit plans that are generally made available to senior Precigen exempt executives.

Pursuant to the CEO Employment Agreement, in the event Dr. Sabzevari's employment is terminated by the Company without Cause or by Dr. Sabzevari for Good Reason, subject to her execution of a release of claims, Dr. Sabzevari would be eligible to receive (i) an amount equal to 18 months of her then-current base annual salary (or, in the event of a material reduction of Dr. Sabzevari's base salary giving rise to Good Reason, her pre-reduction base salary), (ii) a pro rata portion of her maximum annual performance bonus for the calendar year of her termination plus any annual bonus for the calendar year prior to the date of her termination of employment that would have been earned but for her termination date occurring prior to the date of payment of such bonus, (iii) full acceleration of any unvested portion of the Initial Equity Grants (as defined in her employment agreement), (iv) full acceleration of any unvested portion of the Performance Equity Grants (as defined in her employment agreement) in the event such termination occurs within 12 months of a Change in Control, as defined our Amended and Restated 2013 Omnibus Incentive Plan (the "2013 Plan") (see "Equity Award Provisions" below), and (v) if elected, payment or reimbursement for COBRA healthcare continuation coverage for up to 18 months following the termination date.

Regardless of the reason of termination, under the CEO Employment Agreement, Dr. Sabzevari will be entitled to receive (i) any earned, but unpaid, base salary through the date of termination, (ii) a cash payout of accrued but unused vacation, and (iii) any amounts owed for reimbursement of expenses pursuant to applicable Precigen reimbursement policies.

"Cause" under CEO Employment Agreement has generally the same meaning as "Cause" in the employment agreements with the other named executive officers, except that a continued failure to substantially perform material duties does not constitute cause and that only material acts of dishonesty, illegal conduct, fraud, embezzlement, misappropriation, material misconduct, or breach of fiduciary duty constitute Cause.

"Good Reason" under Dr. Sabzevari's Employment Agreement has generally the same meaning as "Good Reason" in the employment agreements with the other named executive officers, except that a

reduction in her base salary of more than 5%, other than a general reduction for similarly situated employees not to exceed 10%, constitutes "Good Reason."

Equity Award Provisions

To ensure that we will have the continued dedicated service of certain executives, including some of our named executive officers, notwithstanding the possibility, threat, or occurrence of a Change in Control, our stock option and RSU award agreements with our named executive officers contain change in control provisions. Specifically, these agreements provide that in the event a Change in Control occurs and no provision is made for the continuance, assumption or substitution of the option award by the Company or its successor in connection with the Change in Control, then the award will vest in full, to the extent not already vested, on the earlier of the date of the Change in Control or the date the award is to be terminated in connection with the Change in Control, provided the executive has remained continuously employed by the Company or any affiliate from the grant date until such time.

The Compensation Committee believes that the Change in Control provisions in our 2013 Plan and our stock option awards serve the best interests of our Company and our shareholders by ensuring that if a Change in Control is ever under consideration, our executives are able to perform their duties and responsibilities and advise the Board about the potential transaction in the best interests of shareholders, without being unduly influenced by the distracting uncertainty and risk associated with a Change in Control, such as fear of the economic consequences of losing their equity awards as a result of a Change in Control.

A "Change in Control" is defined in the 2013 Plan to mean generally the occurrence of any of the following events:

- (a) the accumulation in any number of related or unrelated transactions by any person of beneficial ownership (as such term is used in Rule 13d-3 promulgated under the Exchange Act) of more than 50% of the combined voting power of our voting stock; provided that for purposes of this subsection (a), a Change in Control will not be deemed to have occurred if the accumulation of more than 50% of the voting power of our voting stock results from any acquisition of voting stock (i) directly from the Company that is approved by the Incumbent Board (as defined in the 2013 Plan), (ii) by the Company, (iii) by any employee benefit plan (or related trust) sponsored or maintained by us or any affiliate, or (iv) by any person pursuant to a merger, consolidation, reorganization or other transaction (a "Business Combination") that would not cause a Change in Control under subsection (b), (c) or (d) below;
- (b) consummation of a Business Combination, unless, immediately following that Business Combination, (i) all or substantially all of the persons who were the beneficial owners of our voting stock immediately prior to that Business Combination beneficially own, directly or indirectly, more than 50% of the then outstanding shares of common stock and more than 50% of the combined voting power of the then outstanding voting stock entitled to vote generally in the election of directors of the entity resulting from that Business Combination (including, without limitation, an entity that as a result of that Business Combination owns the Company or all or substantially all of our assets either directly or through one or more subsidiaries) in substantially the same proportions relative to each other as their ownership, immediately prior to that Business Combination, of our voting stock:
- (c) a sale or other disposition of all or substantially all of our assets, except pursuant to a Business Combination that would not cause a Change in Control under subsection (b) above or (d) below;
- (d) approval by the shareholders of a complete liquidation or dissolution of the Company, except pursuant to a Business Combination that would not cause a Change in Control under subsection (b) and (c) above;
- (e) the acquisition by any person, directly or indirectly, of the power to direct or cause the direction of our management and policies (i) through the ownership of securities which provide the holder with such power, excluding voting rights attendant with such securities, or (ii) by contract; provided that a Change in Control will not be deemed to have occurred if such power was acquired (x) directly from the Company in a transaction approved by the Incumbent Board, (y) by an

employee benefit plan (or related trust) sponsored or maintained by the Company or any affiliate or (z) by any person pursuant to a Business Combination that would not cause a Change in Control under subsections (b), (c) or (d) above; or

(f) During any period of two consecutive years, the Incumbent Board ceases to constitute a majority of the Board.

Notwithstanding the foregoing, a "Change in Control" does not include any accumulation of beneficial ownership or any Business Combination pursuant to which more than 50% of the beneficial ownership of the combined voting power of our voting stock is owned by (i) Randal J. Kirk, his spouse, his descendants and the spouses of his descendants, (ii) trusts and other entities established generally for the benefit of Randal J. Kirk, his spouse, his descendants and the spouses of his descendants, (iii) Third Security Staff 2001 LLC and any related funds, investors or entities, and/or (iv) any entities established by any of the foregoing.

In addition, our stock option and RSU award agreements with our named executive officers provide for the full vesting of the awards in the event of termination by reason of the named executive officer's death or disability.

Potential Payments

The following table shows the potential payments upon termination without cause or for good reason by the executive officer, a change in control of the Company, incapacity or death for the named executive officers based on agreements and plans in effect as of December 31, 2022. The amounts in this table are calculated assuming the triggering event occurred on December 31, 2022 and all executives were paid in a lump sum payment.

		Potential Payments upon Termination or a Change in Control				
		Termination Without Cause or for Good Reason (Prior to a Change in Control) (\$)	Termination Without Cause or for Good Reason (Within 12 Months of a Change in Control) (\$)	Change in Control (No Termination) ⁽¹⁾ (\$)	Disability ⁽²⁾ (\$)	Death ⁽³⁾ (\$)
Helen Sabzevari	Accelerated Equity	_	26,851	26,851	26,851	26,851
	Severance Payment	1,500,000	1,500,000	_	_	_
	Prorated Bonus	1,500,000	1,500,000	_	_	_
	Other Compensation (PTO)	96,154	96,154	_	96,154	96,154
	Benefit Plans	13,733 ⁽⁴⁾	13,733 ⁽⁴⁾		630,000	1,545,000
	Total	3,107,190	3,134,041	26,851	753,005	1,668,005
Harry Thomasian Jr.	Accelerated Equity					_
	Severance Payment	_	_	_	_	_
	Other Compensation (PTO)	27,829	27,829	_	27,829	27,829
	Benefit Plans	_	_	_	630,000	1,425,000
	Total	27,829	27,829		657,829	1,452,829
Donald P. Lehr	Accelerated Equity		_	28,787	28,787	28,787
	Severance Payment	862,500	862,500	_	_	_
	Other Compensation (PTO)	55,288	55,288	_	55,288	55,288
	Benefit Plans	58,425 ⁽⁴⁾	58,425 ⁽⁴⁾	_	630,000	1,545,000
	Total	976,213	976,213	28,787	714,075	1,629,075

Potential Payments upon '	Termination or a	Change in Control

		Termination Without Cause or for Good Reason (Prior to a Change in Control) (\$)	Termination Without Cause or for Good Reason (Within 12 Months of a Change in Control) (\$)	Change in Control (No Termination) ⁽¹⁾ (\$)	Disability ⁽²⁾ (\$)	Death ⁽³⁾ (\$)
Jeffrey Perez	Accelerated Equity			28,787	28,787	27,787
	Severance Payment	750,000	750,000	_		_
	Other Compensation (PTO)	48,077	48,077	_	48,077	48,077
	Benefit Plans	51,778 ⁽⁴⁾	51,778 ⁽⁴⁾	_	630,000	1,545,000
	Total	849,855	849,855	27,787	706,864	1,624,864
Rutul R. Shah	Accelerated Equity					
	Severance Payment	_	_	_	_	
	Other Compensation (PTO)	34,848	34,848		34,848	34,848
	Benefit Plans				630,000	1,145,000
	Total	34,848	34,848		664,868	1,179,848

- (1) In the event of a change in control, as described above, unvested stock options and RSUs vest immediately unless provision is made for the continuance, assumption, or substitution of the option award by the Company or its successor. For purposes of this table, we assume that no such provision has been made. This column reflects the value of the accelerated vesting, which is calculated (i) for stock options by multiplying the number of shares subject to accelerated vesting under outstanding stock options by the difference between \$1.52 (which was the closing market price per share of our common stock on December 30, 2022, the last trading day of fiscal 2022) and the per-share exercise price of the applicable accelerated stock option and (ii) for RSUs by multiplying the number of shares subject to accelerated vesting under outstanding RSUs by \$1.52.
- (2) The named executive officer would also be eligible for benefits payable under the long-term disability insurance policy maintained by the Company.
- (3) The named executive officer's heirs would also be eligible for benefits under the life insurance policy maintained by the Company.
- (4) Includes the full premium cost of COBRA healthcare continuation coverage payable for 18 months following the executive's termination, assuming that the executive does not become eligible to receive healthcare coverage from a subsequent employer or otherwise becomes ineligible for COBRA healthcare continuation coverage during this period.

PAY VERSUS PERFORMANCE

In accordance with rules adopted by the Securities and Exchange Commission pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, we provide the following disclosure regarding executive compensation for our principal executive officer ("PEO") and Non-PEO NEOs and Company performance for the fiscal years listed below. For the most recently completed fiscal year, we did not use any financial performance measure to link Compensation Actually Paid to our NEOs to the Company's performance; accordingly, this disclosure does not present a company-selected measure in the table below nor a tabular list of our most important performance measures, as permitted by the Securities and Exchange Commission. For further information regarding our performance-based approach to executive compensation and how the Company aligns executive compensation with the Company's performance, see "Compensation Discussion and Analysis."

	Summary Compensation	Compensation	Average Summary Compensation	Average Compensation	Value o Fixed Invest based	\$100 ment	
Year	Table Total for Helen Sabzevari ⁽¹⁾ (\$)	Actually Paid to Helen Sabzevari ⁽¹⁾⁽²⁾⁽³⁾ (\$)	Table Total for Non-PEO NEOs ⁽¹⁾ (\$)	Actually Paid to Non-PEO NEOs ⁽¹⁾⁽²⁾⁽³⁾ (\$)	TSR (\$)	Peer Group TSR (\$)	Net Income (Loss) (\$ Millions) ⁽⁵⁾
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
2022	3,497,620	(1,088,021)	892,363	601,344	27.74	113.65	28.3
2021	2,516,168	(16,112,695)	611,020	230,396	67.70	126.45	(92.2)
2020	20,409,916	41,484,902	1,168,689	1,740,335	186.13	126.42	(170.5)

(1) Helen Sabzevari was our PEO for each year presented. The individuals comprising the Non-PEO NEOs for each year presented are listed below.

2020		2021	Ĺ	2022	
Donald P.	Lehr	Harry Thom	ıasian Jr.	Harry Thomasian	ı Jr.
Jeffery P	erez	Donald P	. Lehr	Donald P. Leh	r
Rick Ster	ling	Jeffery I	Perez	Jeffery Perez	
Randal F	Kirk	Rick Ste	erling	Rutul Shah	
		Brad Osl	borne		
		James V. L	∟ambert		

- (2) The amounts shown for Compensation Actually Paid have been calculated in accordance with Item 402(v) of Regulation S-K and do not reflect compensation actually earned, realized, or received by the Company's NEOs. These amounts reflect the Summary Compensation Table Total with certain adjustments as described in footnote (3) below.
- (3) Compensation Actually Paid reflects the exclusions and inclusions of certain amounts for the PEO and the Non-PEO NEOs as set forth below. Equity values are calculated in accordance with FASB ASC Topic 718. Amounts in the Exclusion of Stock Awards and Option Awards column are the totals from the Stock Awards and Option Awards columns set forth in the Summary Compensation Table.

Year	Summary Compensation Table Total for PEO (\$)	Exclusion of Stock Awards and Option Awards for PEO (\$)	Inclusion of Equity Values for PEO (\$)	Compensation Actually Paid to PEO (\$)
2022	3,497,620	(2,209,127)	(2,376,516)	(1,088,021)
2021	2,516,168	(749,998)	(17,878,865)	(16,112,695)
2020	20,409,916	(18,644,600)	39,719,586	41,484,902
	Average Summary	Average Exclusion of Stock Awards	Average	Average
Year	Compensation Table Total for Non-PEO NEOs (\$)	and Option Awards for Non-PEO NEOs (\$)	Inclusion of Equity Values for Non-PEO NEOs (\$)	Compensation Actually Paid to Non-PEO NEOs (\$)
Year 2022	Compensation Table Total for Non-PEO NEOs	and Option Awards for Non-PEO NEOs	Inclusion of Equity Values for Non-PEO NEOs	Actually Paid to Non-PEO NEOs
	Compensation Table Total for Non-PEO NEOs (\$)	and Option Awards for Non-PEO NEOs (\$)	Inclusion of Equity Values for Non-PEO NEOs (\$)	Actually Paid to Non-PEO NEOs (\$)
2022	Compensation Table Total for Non-PEO NEOs (\$) 892,363	and Option Awards for Non-PEO NEOs (\$)	Inclusion of Equity Values for Non-PEO NEOs (\$)	Actually Paid to Non-PEO NEOs (\$) 601,344

The amounts in the Inclusion of Equity Values in the tables above are derived from the amounts set forth in the following tables. The Company does not pay any dividends and consequently, no adjustment for dividends is shown in the following tables.

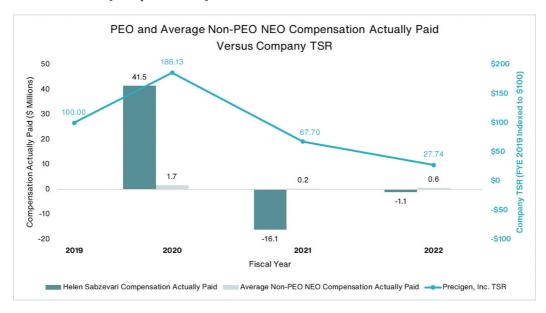
Year	Year-End Fair Value of Equity Awards Granted During Year That Remained Unvested as of Last Day of Year for PEO (\$)	Change in Fair Value from Last Day of Prior Year to Last Day of Year of Unvested Equity Awards for PEO (\$)	Vesting-Date Fair Value of Equity Awards Granted During Year that Vested During Year for PEO (\$)	Change in Fair Value from Last Day of Prior Year to Vesting Date of Univested Equity Awards that Vested During Year for PEO (\$)	Fair Value at Last Day of Prior Year of Equity Awards Forfeited During Year for PEO (\$)	Total – Inclusion of Equity Values for PEO (\$)
2022	933,566	(3,366,326)	426,136	(369,892)	0	(2,376,516)
2021	0	(17,338,751)	662,450	(1,202,564)	0	(17,878,865)
2020	37,870,674	595,965	1,300,000	(47,053)	0	39,719,586
Year	Average Year-End Fair Value of Equity Awards Granted During Year That Remained Unvested as of Last Day of Year for Non-PEO NEOs (\$)	Equity Awards for Non-PEO NEOs (\$)	Average Vesting-Date Fair Value of Equity Awards Granted During Year that Vested During Year for Non-PEO NEOs (\$)	Average Change in Fair Value from Last Day of Prior Year to Vesting Date of Unvested Equity Awards that Vested During Year for Non-PEO NEOs (\$)	Average Fair Value at Last Day of Prior Year of Equity Awards Forfeited During Year for Non-PEO NEOs (\$)	Total – Average Inclusion of Equity Values for Non-PEO NEOs (\$)
2022	192,885	(122,266)	32,298	(36,629)	0	66,288
2021	84,641	(105,418)	65,018	(47,094)	(162,536)	(165,389)
2020	136,606	429,872	692,095	(33,487)	0	1,225,086

For the values of equity awards included in the above tables, the valuation of certain stock option awards uses the Black-Scholes option-pricing model with volatility assumptions that may differ materially from those disclosed as of the grant date. For purposes of this table, full reliance on the Company's historical volatility was used even in cases where there was not full history, when on the grant date, a weighted blend of the Company's volatility and the average historical peer volatilities was used.

- (4) The Peer Group TSR set forth in this table utilizes the NASDAQ Biotechnology Index, which we also utilize in the stock performance graph required by Item 201(e) of Regulation S-K included in our Annual Report for the year ended December 31, 2022. The comparison assumes \$100 was invested for the period starting December 31, 2019, through the end of each of the listed years in the Company and in the NASDAQ Biotechnology Index, respectively. Historical stock performance is not necessarily indicative of future stock performance.
- (5) Reflects "Net Income (loss)" for each applicable year as set forth in our Consolidated Statements of Operations included in our Annual Report on Form 10-K for each of the applicable years.

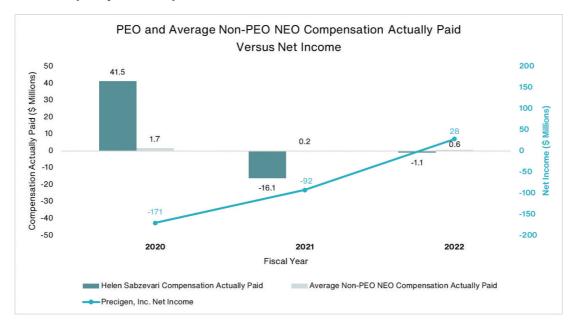
Description of Relationship Between PEO and Non-PEO NEO Compensation Actually Paid and Company Total Shareholder Return ("TSR")

The following chart sets forth the relationship between Compensation Actually Paid to our PEO, the average of Compensation Actually Paid to our Non-PEO NEOs, and the Company's cumulative TSR over the three most recently completed fiscal years.



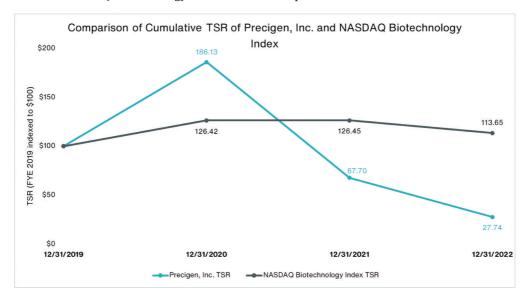
Description of Relationship Between PEO and Non-PEO NEO Compensation Actually Paid and Net Income (loss)

The following chart sets forth the relationship between Compensation Actually Paid to our PEO, the average of Compensation Actually Paid to our Non-PEO NEOs, and our Net Income (loss) during the three most recently completed fiscal years.



Description of Relationship Between Company TSR and Peer Group TSR

The following chart compares our cumulative TSR over the three most recently completed fiscal years to that of the NASDAQ Biotechnology Index over the same period.



CEO PAY RATIO

As required by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and Item 402(u) of Regulation S-K ("Item 402(u)"), we are providing the following information about the relationship between the annual total compensation of our employees and the annual total compensation of Helen Sabzevari, Ph.D., our CEO during 2022. The pay ratio included in this information is a reasonable estimate calculated in a manner consistent with Item 402(u). Because Item 402(u) affords a large degree of flexibility in calculating the CEO pay ratio by allowing the use of reasonable estimates, assumptions and methodologies, the pay ratio disclosed by us below may not be comparable to pay ratio disclosures presented by other companies.

For 2022, our last completed fiscal year:

- as reported in the Summary Compensation Table, the annual total compensation of our CEO was \$3,497,620 (see above for details on this calculation); and
- the annual total compensation of our median employee (other than our CEO) was \$115,000.

Based on this information, for 2022, the ratio of the annual total compensation of our CEO to the median of the annual total compensation of all employees was 30 to 1.

In accordance with Item 402(u), we were required to reidentify our median employee for 2022 as there was a significant change to our employee population in 2022 that we believe would have significantly affected our pay ratio disclosure had we used the same median employee identified for purposes of our 2020 pay ratio disclosure, which was the last time we identified a median employee. Our pay ratio may fluctuate from year-to-year due to changes in the median employee's or our CEO's compensation. We believe putting into context how our median employee was identified highlights why that employee's compensation and the resulting pay ratio, and year-over-year changes thereto, should not be compared on an "apples-to-apples" basis.

Consistent with our methodology disclosed in our 2020 proxy statement, to identify the median of the annual total compensation of all our employees, as well as to determine the annual total compensation of the median employee, the methodology and the material assumptions, adjustments, and estimates used were as follows:

Determination Date

We selected December 31, 2022 as the date from which to determine our total employee population and gather pay data.

Employee Population

As of December 31, 2022, according to internal payroll records, our total employee population, excluding our CEO, consisted of approximately 190 individuals working at our Company or within our consolidated subsidiaries on either a full-time or part-time basis. Out of these approximate 190 individuals, 85% are located in North America and 15% are located in Europe.

Methodology

To identify the median employee, a listing was prepared of our employee population as of December 31, 2022. We annualized the compensation of any permanent employees, employed either part-time or full-time, who were employed by us for less than the full fiscal year. Additionally, we converted non-USD currency to USD using the Oanda conversion rate as of December 28, 2022. We then compared the actual cash compensation received during 2022 for those employees, consisting of base salary amounts and annual incentive awards as reflected by internal payroll records. We identified our median employee using this compensation measure, which was consistently applied to all of our employees across the employee population. Using this methodology, we determined that the median employee was a full-time, salaried employee located in the United States.

Annual Total Compensation

With respect to the annual total compensation of the median employee, we identified and calculated the elements of such employee's compensation for 2022 in accordance with the requirements of Item 402(c)(2) (x) of Regulation S-K. This calculation is the same calculation used for our named executive officers as set forth in the Summary Compensation Table earlier in this Proxy Statement. With respect to the annual total compensation of our CEO, we used the amount reported in the "Total" column of the Summary Compensation Table herein.

EQUITY COMPENSATION PLAN INFORMATION

The following table sets forth certain information as of December 31, 2022 with respect to securities that may be issued pursuant to outstanding awards granted under our 2008 Equity Incentive Plan (the "2008 Plan"), the 2013 Plan, and the Incentive Plan for Non-Employee Service Providers (as amended, the "2019 Plan") and authorized for issuance under the 2013 Plan and the 2019 Plan. No new awards may be granted under the 2008 Plan. Each of these equity compensation plans was adopted with the approval of our shareholders.

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted- Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in column (a)) (c)
Equity compensation plans approved by shareholders	15,899,091 ⁽¹⁾	\$10.41	20,192,485 ⁽²⁾
Equity compensation plans not approved by shareholders		_	
Total	15,899,091	\$10.41	20,192,485

- $(1) \quad Includes \ 15,201,276 \ outstanding \ stock \ options \ and \ 697,815 \ outstanding \ RSUs.$
- (2) Our 2013 Plan, in addition to being available for future issuance upon exercise of stock options and vesting of RSUs that have been or may be granted after December 31, 2022, and our 2019 Plan, each provide for the issuance of SARS, restricted stock awards, other stock-based awards, incentive awards, and dividend equivalents.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of transactions since January 1, 2022 to which we have been a party, in which the amount involved exceeded or will exceed \$120,000, and in which any of our directors, executive officers or beneficial owners of more than 5% of our voting securities, or affiliates or immediate family members of any of our directors, executive officers or beneficial owners of more than 5% of our voting securities, had or will have a direct or indirect material interest.

We believe that each of these transactions was on terms no less favorable to us than terms we could have obtained from unaffiliated third parties. Moreover, all of these transactions have been approved by a majority of the independent and disinterested members of the Board. It is our intention to ensure that all future transactions, if any, between us and our officers, directors, principal shareholders and their affiliates or family members, are approved by the Audit Committee or a majority of the independent and disinterested members of the Board, and are on terms no less favorable to us than those that we could obtain from unaffiliated third parties.

Transactions with ECC Parties, Joint Ventures and Majority-Owned Subsidiaries

Intrexon Energy Partners and Intrexon Energy Partners II

In March 2014, we and certain investors (the "IEP Investors"), including an affiliate of Mr. Kirk, NRM VII Holdings I, LLC, entered into a Limited Liability Company Agreement which governs the affairs and conduct of business of Intrexon Energy Partners, LLC ("Intrexon Energy Partners"), a joint venture formed to optimize and scale-up our methane bioconversion platform technology for the production of certain fuels and lubricants. We also entered into an ECC with Intrexon Energy Partners providing exclusive rights to our technology for the use in bioconversion, as a result of which we received a technology access fee of \$25 million while retaining a 50% membership interest in Intrexon Energy Partners. The IEP Investors made initial capital contributions, totaling \$25 million in the aggregate, in exchange for pro rata membership interests in Intrexon Energy Partners totaling 50%.

In December 2015, we and certain investors (the "IEP II Investors"), including Harvest, entered into a Limited Liability Company Agreement which governs the affairs and conduct of business of Intrexon Energy Partners II, LLC ("Intrexon Energy Partners II"), a joint venture formed to utilize our natural gas bioconversion platform for the production of 1,4-butanediol, an industrial chemical intermediate used to manufacture spandex, polyurethane, plastics, and polyester. We also entered into an ECC with Intrexon Energy Partners II providing exclusive rights to our technology for the use in the field, as a result of which we received a technology access fee of \$18 million while retaining a 50% membership interest in Intrexon Energy Partners II. The IEP II Investors made initial capital contributions, totaling \$18 million in the aggregate, in exchange for pro rata membership interests in Intrexon Energy Partners II totaling 50%. In December 2015, the owners of Intrexon Energy Partners II made a capital contribution of \$4 million, half of which was paid by us. We committed to make capital contributions of up to \$10 million, and the IEP II Investors, as a group and pro rata in accordance with their respective membership interests in Intrexon Energy Partners, have committed to make additional capital contributions of up to \$10 million, at the request of the Intrexon Energy Partners II board of managers, or the Intrexon Energy Partners II Board, and subject to certain limitations.

In July 2022, we obtained control of both of Intrexon Energy Partners Board and Intrexon Energy Partners II Board. Based on our assessment of the status of each collaboration and ultimate dissolution of Intrexon Energy Partners and Intrexon Energy Partners II, we determined that it was probable that no further performance obligations would occur under the respective collaboration agreements. Accordingly, the Company recognized the remaining balance of deferred revenue associated with Intrexon Energy Partners and Intrexon Energy Partners II, less the amounts paid to acquire the membership interests of the investors of \$7,000, for an aggregate amount of revenue recognized of approximately \$14,561.

Policies and Procedures for Related Person Transactions

The Board has adopted a written related policy with respect to related person transactions. This policy governs the review, approval or ratification of covered related person transactions. The Audit Committee of the Board oversees and manages this policy.

For purposes of this policy, a "related person transaction" is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we (or any of our subsidiaries) were, are or will be a participant, and the amount involved exceeds \$120,000 and in which any related person had, has or will have a direct or indirect interest. For purposes of determining whether a transaction is a related person transaction, the Audit Committee relies upon Item 404 of Regulation S-K, promulgated under the Exchange Act.

The policy generally provides that we may enter into a related person transaction only if:

- the Audit Committee pre-approves such transaction in accordance with the guidelines set forth in the policy;
- the transaction is on terms comparable to those that could be obtained in arm's length dealings with an unrelated third party and the Audit Committee (or the chairperson of the Audit Committee) approves or ratifies such transaction in accordance with the guidelines set forth in the policy;
- the transaction is approved by the disinterested members of the Board; or
- the transaction involves compensation approved by the Compensation Committee.

In the event a related person transaction is not pre-approved by the Audit Committee and our management determines to recommend such related person transaction to the Audit Committee, such transaction must be reviewed by the Audit Committee. After review, the Audit Committee will approve or disapprove such transaction. When our Chief Legal Officer, in consultation with our CEO or our Chief Financial Officer, determines that it is not practicable or desirable for us to wait until the next Audit Committee meeting, the chairperson of the Audit Committee possesses delegated authority to act on behalf of the Audit Committee. The Audit Committee (or the chairperson of the Audit Committee) may approve only those related person transactions that are in, or not inconsistent with, our best interests and the best interests of our shareholders, as the Audit Committee (or the chairperson of the Audit Committee) determines in good faith.

The Audit Committee has determined that certain types of related person transactions are deemed to be pre-approved by the Audit Committee. Our related person transaction policy provides that the following transactions, even if the amount exceeds \$120,000 in the aggregate, are considered to be pre-approved by the Audit Committee:

- · any employment of certain named executive officers that would be publicly disclosed;
- director compensation that would be publicly disclosed;
- transactions with other companies where the related person's only relationship is as a director or
 owner of less than 10% of said company (other than a general partnership), if the aggregate amount
 involved does not exceed the greater of \$200,000 or 5% of that company's consolidated gross
 revenues;
- transactions where all shareholders receive proportional benefits;
- · transactions involving competitive bids;
- transactions with a related person involving the rendering of services at rates or charges fixed in conformity with law or governmental authority; and
- transactions with a related person involving services as a bank depositary of funds, transfer agent, registrar, trustee under a trust indenture or similar services.

In addition, the Audit Committee will review the policy at least annually and recommend amendments to the policy to the Board from time to time.

The policy provides that all related person transactions will be disclosed to the Audit Committee, and all material related person transactions will be disclosed to the Board. Additionally, all related person transactions requiring public disclosure will be properly disclosed, as applicable, on our various public filings.

The Audit Committee will review all relevant information available to it about the related person transaction. The policy provides that the Audit Committee may approve or ratify the related person transaction only if the Audit Committee determines that, under all of the circumstances, the transaction is in, or is not inconsistent with, our best interests. The policy provides that the Audit Committee may, in its sole discretion, impose such conditions as it deems appropriate on us or the related person in connection with approval of the related person transaction.

PROPOSAL 4 APPROVAL OF THE PRECIGEN, INC. 2023 OMNIBUS INCENTIVE PLAN

Overview

On April 21, 2023, upon the recommendation of the Compensation Committee, our Board adopted the Precigen, Inc. 2023 Omnibus Incentive Plan (the "2023 Plan"), subject to approval by our shareholders. The 2023 Plan is intended to replace the Company's Amended and Restated 2013 Omnibus Incentive Plan (as amended, the "2013 Plan", or the "Prior Plan") — which was initially approved by our shareholders at our 2014 Annual Meeting.

In connection with the design and adoption of the 2023 Plan, our Board and the Compensation Committee carefully considered our anticipated future equity needs, our historical equity compensation practices and the advice of the Compensation Committee's independent compensation consultant. The aggregate number of shares being requested for authorization under the 2023 Plan is 12,500,000 *plus* the number of shares remaining available for future grant under the Prior Plan as of the date of shareholder approval of the 2023 Plan (which, as of April 17, 2023 was 9,396,501 shares). The additional 12,500,000 shares available for issuance under the 2023 Plan would represent approximately 4.89% of our outstanding shares as of the Board adoption date. The Board believes the number of shares reserved for issuance under the 2023 Plan represents a reasonable amount of potential additional equity dilution.

If the 2023 Plan is approved by our shareholders, it will replace the Prior Plan, and we will cease granting any new awards under the Prior Plan. If the 2023 Plan is not approved by our shareholders, the Prior Plan will remain in effect in its current form, and we will continue to be able to grant equity incentive awards under the Prior Plan until its expiration, which will occur in 2023. Following the expiration of the Prior Plan, we will be unable to maintain our current equity grant practices and, therefore, we will be at a significant competitive disadvantage in attracting, retaining and motivating talented individuals who contribute to our success. We will also be compelled to replace equity incentive awards with cash awards, which may not align the interests of our executives and employees with those of our shareholders as effectively as equity incentive awards.

Considerations for the Approval the 2023 Plan

Importance of Long-Term Equity Incentives. Long-term equity incentives are an important component of our executive compensation program, motivating officers and employees, non-employee directors, and other service providers to make decisions that focus on creating long-term value for shareholders, aligning their interests with the interests of shareholders, and serving as an effective recruitment and retention tool.

Corporate Governance Best Practices

The 2023 Plan has been designed to build upon the effectiveness of the Prior Plan and the 2023 Plan incorporates certain corporate governance best practices to further align our equity compensation program with the interests of our shareholders. The following is a list of some of these best practices, which are intended to protect the interests of our shareholders:

- No evergreen provision. The 2023 Plan does not contain an "evergreen" feature pursuant to which the shares authorized for issuance under the plan can be increased automatically without shareholder approval.
- ✓ Minimum vesting requirements. Awards under the 2023 Plan are subject to a minimum vesting period of one year from the date of grant, with only narrow exceptions, which we believe strengthen our employees' interest in creating long-term value for our shareholders.
- Restricted dividends and dividend equivalents on awards. The 2023 Plan permits payment of dividend equivalents on awards subject to a vesting condition only if and when the underlying award vests. The 2023 Plan also prohibits the payment of dividend equivalents on shares subject to outstanding options or stock appreciation right awards ("SARs").

- ✓ No discounted options or SARs. Stock options and SARs must have an exercise price per share that is no less than the fair market value of our common stock on the date of grant.
- ✓ No repricing. Repricing of options and SARs is not be permitted without shareholder approval, except for adjustments with respect to certain specified extraordinary corporate transactions.
- ✓ No "liberal" change in control definition. The change in control definition under the 2023 Plan is only be triggered in those instances where an actual change in control occurs.
- ✓ No automatic single-trigger vesting of employee awards. Awards granted under the 2023 Plan to employees will not vest automatically upon a change in control, unless such awards are not assumed, substituted or continued by a successor entity.
- ✓ Limit on non-employee director compensation. The maximum aggregate compensation that may be paid to any non-employee director any calendar year (including cash and awards under the 2023 Plan) is \$750,000, or \$1 million for the year in which such director is first elected or appointed to the Board.
- Clawback of awards. The Compensation Committee has the authority to subject awards granted under the 2023 Plan to any clawback or recoupment policies that the Company has in effect from time to time.

Historical Burn Rate. We are committed to managing the use of our equity incentives prudently to balance the benefits equity compensation brings to our compensation program with the dilution it causes our shareholders. As part of our analysis when considering the proposed share increase, we considered the 2013 Plan's three-year average "burn rate," or the number of shares subject to equity awards granted from the beginning of 2020 through the first quarter of 2023, divided by the weighted average number of shares outstanding for that period. For each of 2022, 2021 and 2020, our "burn rate" was 2.2%, 1.1%, and 4.5%, respectively.

We also considered that during the period from the beginning of 2020 through first quarter of 2023, we made equity grants from the 2013 Plan in connection with the following: leadership appointments to advance our efforts, including the appointments of our CEO and CFO; the compensation of employees who we believe are critical to furthering our business strategy; equity grants in lieu of cash compensation; incentivizing our key officers and employees; and our former Restricted Stock Unit Agreement with Mr. Kirk that expired on March 31, 2020. We believe these new hires and compensation decisions are critical to the development and strength of our senior management team to attract the experience and talent necessary to further implement our strategy.

Overhang Percentage. Over the period from January 1, 2020 through March 31, 2023, our overhang percentage has averaged 14.1%, which is based on an average of (i) approximately 15,154,740 shares subject to outstanding equity awards under the 2013 Plan and the 2019 Incentive Plan for Non-Employee Service Providers (as amended, the "2019 Plan"), (ii) 12,841,745 shares available for future equity awards under the 2013 Plan and 2019 Plan, and (iii) 198,739,160 shares of the Company outstanding on a fully-diluted basis. The following table sets forth the total equity dilution as of the date of this Proxy Statement:

Number of Stock Options Outstanding	16,930,366
Weighted Average Exercise Price	\$ 9.41
Weighted Average Term (in years)	6.97
Number of Full-Value Stock Awards Outstanding	1,877,308
Number of Shares Remaining for Future Grant	13,898,967
2013 Plan	9,396,501
2019 Plan	4,502,466
Common Shares Outstanding as of April 25, 2023	255,482,753
Overhang Percentage	12.8%

If approved, the 12,500,000 additional shares reserved for issuance under the 2023 Plan would increase the overhang percentage to approximately 17.7%.

Shareholder Value Transfer Test. When evaluating the appropriate number of shares to reserve under the 2023 Plan, we reviewed the shareholder value transfer of the proposed increase, calculated as the value of available shares and plan awards as a percentage of our market capitalization, and determined that a share reserve of 12,500,000 new shares under the 2023 Plan was reasonable and consistent with industry guidelines.

Expected Duration. Based on our usage of shares authorized for issuance under the Prior Plan and our reasonable expectation of future equity usage, we believe that the number of shares being requested for authorization under the 2023 Plan will last at least 12 months (or perhaps longer). Expectations regarding future share usage could be impacted. by a number of factors such as hiring and promotion activity at the executive level; the rate at which shares are returned to the 2023 Plan reserve upon awards' expiration, forfeiture, or cash settlement; the future performance of our stock price; consequences of acquisitions or dispositions; and other factors. While we believe that the assumptions we used are reasonable, future share usage may differ from current expectations. If, however, the shareholders do not approve the 2023 Plan, there may not be a sufficient number of shares of our common stock available to achieve our recruiting and retention objectives.

Attract and Retain Talent. We grant equity incentive awards to a broad spectrum of our employees, not only executives and named executive officers. Approving the 2023 Plan will enable us to continue to recruit, retain and motivate top talent at many levels within the Company necessary to our success following the expiration of the Prior Plan.

Summary of the Material Terms of the 2023 Plan

The following is a summary of the material terms and principal features of the 2023 Plan. This summary does not purport to be complete and is subject to, and qualified in its entirety by, the 2023 Plan. A copy of the 2023 Plan has been filed with the SEC with this Proxy Statement as Annex A.

Purpose. The purpose of the 2023 Plan is to motivate and reward those employees and other individuals to perform at the highest level and contribute significantly to the success of our Company, thereby furthering our best interests and those of our shareholders.

Eligibility. Our employees, consultants, advisors, other individual service providers and non-employee directors are eligible to receive awards under the 2023 Plan. As of April 17, 2023, there were approximately 194 employees and 9 non-employee directors eligible to receive awards under the 2023 Plan. The basis of participation in the 2023 Plan is the Compensation Committee's decision, in its sole discretion, that an award to an eligible participant will further the 2023 Plan's stated purpose (as described above). In exercising its discretion, the Compensation Committee will consider the recommendations of management and the purpose of the 2023 Plan.

Authorized Shares. Subject to adjustment (as described below), the number of shares that may be subject to awards granted under the 2023 Plan will equal 12,500,000 *plus* the number of shares remaining available for future grant under the Prior Plan as of the date of shareholder approval of the 2023 Plan (which, as of April 17, 2023 was 9,396,501 shares).

If an award (including any award granted under the Prior Plan) expires or is canceled or forfeited, or is otherwise settled without the issuance of shares, the shares covered by the award will again be available for issuance under the 2023 Plan. Shares surrendered or withheld in payment of taxes related to an award (including any award granted under the Prior Plan) will become available again for issuance under the 2023 Plan. Shares tendered or withheld in payment of an exercise or purchase price will be available for issuance under the 2023 Plan. Shares underlying substitute awards (i.e., awards granted as replacements for awards granted by a company that we acquire or with which we combine) will not reduce the number of shares available for issuance under the 2023 Plan.

Individual Limits.

The maximum number of shares that may be issued pursuant to incentive stock options is 12,500,000.

A participant who is a non-employee director may not receive compensation for any calendar year in excess of \$750,000 (or \$1,000,000 for the year in which the non-employee director is first elected or appointed to the Board) in the aggregate, including cash payments and awards granted under the 2023 Plan.

Administration. The 2023 Plan is administered by the Compensation Committee or another committee designated by the Board (or, if the Board does not designate a committee, the Board).

The Compensation Committee has authority under the 2023 Plan to:

- · designate participants;
- determine the types of awards to grant, the number of shares to be covered by awards, the terms and
 conditions of awards, whether awards may be settled or exercised in cash, shares, other awards, other
 property or net settlement, the circumstances under which awards may be canceled, forfeited or
 suspended, and whether awards may be deferred automatically or at the election of the holder or the
 Compensation Committee;
- amend the terms of any outstanding awards;
- correct any defect, supply any omission or reconcile any inconsistency in the 2023 Plan or any award
 agreement, in the manner and to the extent it shall deem desirable to carry the 2023 Plan into effect;
- interpret and administer the 2023 Plan and any instrument or agreement relating to, or award made under, the 2023 Plan;
- establish, amend, suspend or waive rules and regulations, appoint agents and make any other
 determination and take any other action that it deems necessary or desirable to administer the 2023
 Plan, in each case, as it deems appropriate for the proper administration of the 2023 Plan and
 compliance with applicable law, stock market or exchange rules and regulations or accounting or tax
 rules and regulations; and
- make any other determination and take any other action deemed necessary or desirable for the administration of the 2023 Plan and due compliance with applicable law, stock market or exchange rules and regulations or accounting or tax rules and regulations.

The Compensation Committee may delegate the authority to grant awards under the 2023 Plan, to the extent permitted by applicable law, to (i) one or more officers of the Company (except that such delegation will not be applicable to any award for a person then covered by Section 16 of the Exchange Act) and (ii) one or more committees of the Board (which may consist solely of one director).

Types of Awards. The 2023 Plan provides for grants of stock options, SARs, restricted shares, RSUs, performance awards and other stock-based and cash-based awards.

Stock Options. A stock option is a contractual right to purchase shares at a future date at a specified exercise price. The per share exercise price of a stock option (other than a substitute award) will be determined by the Compensation Committee and may not be less than the closing price of a share on the grant date. The Compensation Committee will determine the date after which each stock option may be exercised and the expiration date of each option, provided that no option will be exercisable more than ten years after the grant date. Options that are intended to qualify as incentive stock options must meet the requirements of Section 422 of the Code.

SARs. SARs represent a contractual right to receive, in cash or shares, an amount equal to the appreciation of one share from the grant date. Any SAR will be granted subject to the same terms and conditions as apply to stock options.

Restricted Stock. Restricted stock is an award of shares that are subject to restrictions on transfer and a substantial risk of forfeiture.

RSUs. RSUs represent a contractual right to receive a share (or cash in an amount equal to the value of a share) at a future date, subject to specified vesting and other restrictions.

Performance Awards. Performance awards, which may be denominated in cash or shares, will be earned on the satisfaction of performance goals specified by the Compensation Committee. The Compensation Committee has authority to specify that any other award granted under the 2023 Plan will constitute a performance award by conditioning the exercisability or settlement of the award on the satisfaction of performance goals.

Other Stock-Based Awards. The Compensation Committee is authorized to grant other stock-based awards, which may be denominated in shares or factors that may influence the value of our shares, including convertible or exchangeable debt securities, other rights convertible or exchangeable into shares, purchase rights for shares, dividend rights or dividend equivalent rights or awards with value and payment contingent on our performance or that of our business units or any other factors that the Compensation Committee designates.

Other Cash-Based Awards. The Compensation Committee is authorized to grant other cash-based awards (including cash awarded as a bonus or upon the attainment of specified performance criteria or otherwise as permitted under the 2023 Plan), either independently or as an element of or supplement to any other award under the 2023 Plan.

Adjustments. In the event the Compensation Committee determines that, as a result of any dividend or other distribution, recapitalization, stock split, reverse stock split, reorganization, merger, amalgamation, consolidation, split-up, spin-off, combination, repurchase or exchange of shares or other securities, issuance of warrants or other rights to purchase our shares or other securities, issuance of our shares pursuant to the anti-dilution provisions of our securities, or other similar corporate transaction or event affecting our shares, or of changes in applicable laws, regulations or accounting principles, an adjustment is necessary to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the 2023 Plan, the Compensation Committee will adjust equitably any or all of: (i) the number and type of shares or other securities that thereafter may be made the subject of awards, including the aggregate limits under the 2023 Plan; (ii) the number and type of shares or other securities subject to outstanding awards; (iii) the grant, purchase, exercise or hurdle price for any award or, if deemed appropriate, make provision for a cash payment to the holder of an outstanding award; and (iv) the terms and conditions of any outstanding awards, including the performance criteria of any performance awards.

Termination of Service and Change in Control.

The Compensation Committee may determine in any individual case, the circumstances in which, and the extent to which, an award may be exercised, settled, vested, paid or forfeited in the event of a termination of employment or service prior to the end of a performance period or vesting, exercise or settlement of such award.

In the event of a "change in control" (as defined in the 2023 Plan and described below), the Compensation Committee may, in its sole discretion, take any one or more of the following actions with respect to outstanding awards:

- continuation or assumption of the award by the successor or surviving corporation (or its parent);
- substitution or replacement of the award by the successor or surviving corporation (or its parent) with cash, securities, rights or other property to be paid or issued, as the case may be, by the successor or surviving corporation (or a parent or subsidiary thereof) with substantially the same terms and value as the award (including any applicable performance targets or criteria);
- acceleration of the vesting of the award and the lapse of any restrictions thereon, and in the case of
 options and SARs, acceleration of the right to exercise the award during a specified period (and the
 termination of such option or SAR without payment of any consideration therefor to the extent the
 award is not timely exercised), in each case, either (i) upon a participant's involuntary termination of
 employment or service (including a termination of the participant's employment by us without
 "cause" or by the participant for "good reason" and/or due to the participant's death or "disability,"
 as such terms may be defined in the applicable award agreement and/or the participant's employment
 agreement or offer letter, as the case may be) on or within a specified period following

such change in control or (ii) if the successor or surviving corporation (or its parent) fails to or otherwise does not continue or assume the award;

- in the case of a performance award, determination of the level of attainment of any applicable performance conditions; and
- cancellation of the award in consideration of a payment equal to the value of the award (as
 determined in the discretion of the Compensation Committee), with the form, amount and timing of
 such payment determined by the Compensation Committee in its sole discretion (subject to the terms
 of the 2023 Plan), provided that the Compensation Committee may, in its sole discretion, terminate
 without the payment of any consideration any options or SARs for which the exercise or hurdle price
 is equal to or exceeds the per share value of the consideration to be paid in the change in control
 transaction.

Under the 2023 Plan, a "change in control" generally means the occurrence of one or more of the following events:

- The accumulation by any person of beneficial ownership of more than 50% of the combined voting power of our voting stock (other than such accumulation that results from any acquisition of voting stock (i) directly from our Company approved by the Incumbent Board (as defined in the 2023 Plan), (ii) by our Company, (iii) by any employee benefit plan (or related trust) sponsored or maintained by our Company or any affiliate, or (iv) by any person pursuant to a merger, consolidation, reorganization or other transaction (a "Business Combination") that would not other cause a change in control under the 2023 Plan;
- The consummation of a Business Combination, unless, immediately following that Business Combination, (i) all or substantially all of the persons who were the beneficial owners of our voting stock immediately prior to that Business Combination beneficially own, directly or indirectly, more than 50% of the then outstanding shares of common stock and more than 50% of the combined voting power of the then outstanding voting stock entitled to vote generally in the election of directors of the entity resulting from that Business Combination in substantially the same proportions relative to each other as their ownership, immediately prior to that Business Combination, of our voting stock;
- A sale or other disposition of all or substantially all of our assets;
- Approval by our shareholders of a complete liquidation or dissolution of our Company; or
- During any period of two consecutive years, the Incumbent Board (as defined in the 2023 Plan) ceases to constitute a majority of the Board.

Minimum Vesting Requirements. Each award granted pursuant to the 2023 Plan will vest over a period of not less than one year following the date of grant. However, the Compensation Committee may, in its sole discretion, accelerate the vesting of an award or otherwise lapse or waive this requirement upon the participant's death, disability or a change in control. In addition, the Compensation Committee may grant awards that are not subject to these minimum vesting requirements with respect to 5% or less of the maximum aggregate number of shares available for issuance under the 2023 Plan (as may be adjusted in accordance with the terms of the 2023 Plan).

Amendment and Termination. Our Board may amend, alter, suspend, discontinue or terminate the 2023 Plan, subject to approval of our shareholders if required by the rules of the stock exchange on which our shares are principally traded and except to the extent prohibited by applicable law or otherwise expressly provided in an award agreement. The Compensation Committee may amend, alter, suspend, discontinue or terminate any outstanding award. However, no such board or committee action that would materially adversely affect the rights of a holder of an outstanding award may be taken without the holder's consent, except (i) to the extent that such action is taken to cause the 2023 Plan to comply with applicable law, stock market or exchange rules and regulations or accounting or tax rules and regulations or (ii) to impose any "clawback" or recoupment provisions on any awards in accordance with the terms of the 2023 Plan. In addition, the Compensation Committee may amend the 2023 Plan in such manner as may be necessary or desirable to enable the 2023 Plan to achieve its stated purposes in any jurisdiction in a tax-efficient manner and in compliance with local rules and regulations.

Prohibition on Repricing. Subject to adjustment as described above, the Compensation Committee may not, without the approval of our shareholders, seek to effect any re-pricing of any previously granted "underwater" option, SAR or similar award by (i) amending or modifying the terms of such Award to lower the exercise price; (ii) cancelling the underwater award and granting either (A) replacement awards having a lower exercise price or (B) other awards in exchange; or (iii) cancelling or repurchasing the underwater awards for cash or other securities.

Cancellation or "Clawback" of Awards. The Compensation Committee may specify in an award agreement that a participant's rights, payments and benefits with respect to an award will be subject to reduction, cancellation, forfeiture or recoupment upon the occurrence of certain specified events, in addition to any otherwise applicable vesting or performance conditions of an award. The Compensation Committee will have full authority to implement any policies and procedures necessary to comply with Section 10D of the Exchange Act and any related listing standards rules promulgated thereunder and any other regulatory regimes. Any awards granted under the 2023 Plan will be subject to any clawback or recoupment arrangements or policies the Company has in place from time to time.

Term. No award may be granted under the 2023 Plan after the earliest to occur of (i) the 10-year anniversary of the date of shareholder approval of the 2023 Plan, (ii) the maximum number of shares available for issuance under the 2023 Plan has been issued or (iii) the Board terminates the 2023 Plan.

Material U.S. Federal Income Tax Consequences of Awards under the 2023 Plan

The following discussion summarizes the principal federal income tax consequences associated with awards under the 2023 Plan. The discussion is based on laws, regulations, rulings, and court decisions currently in effect, all of which are subject to change.

ISOs. A participant will not recognize taxable income on the grant or exercise of an ISO (although the excess of the fair market value of the common stock over the exercise price will be included for alternative minimum tax purposes in the year of exercise). A participant will recognize taxable income when he or she disposes of the shares of common stock acquired under the ISO. If the disposition occurs more than two years after the grant of the ISO and more than one year after its exercise (the "ISO holding period"), the participant will recognize long-term capital gain (or loss) to the extent the amount realized from the disposition exceeds (or is less than) the participant's tax basis in the shares of common stock. A participant's tax basis in the shares of common stock acquired under an ISO generally will be the amount the participant paid for the stock. If common stock acquired under an ISO is disposed of before the expiration of the ISO holding period described above, the participant will recognize as ordinary income in the year of the disposition the excess of the fair market value of the common stock on the date of exercise of the ISO over the exercise price. Any additional gain will be treated as long-term or short-term capital gain, depending on the length of time the participant held the shares. Special rules apply if a participant pays the exercise price by delivery of common stock. We will not be entitled to a federal income tax deduction with respect to the grant or exercise of an ISO. However, in the event a participant disposes of common stock acquired under an ISO before the expiration of the ISO holding period described above, we generally will be entitled to a federal income tax deduction equal to the amount of ordinary income the participant recognizes on the disqualifying disposition.

NQSOs. A participant will not recognize any taxable income on the grant of a NQSO. On the exercise of a NQSO, the participant will recognize as ordinary income the excess of the fair market value of the common stock acquired over the exercise price. A participant's tax basis in the common stock then is the amount paid for the shares of common stock plus any amounts included in income on exercise of the NQSO. Special rules apply if a participant pays the exercise price by delivery of common stock. The exercise of a NQSO generally will entitle us to claim a federal income tax deduction equal to the amount of ordinary income the participant recognizes on exercise of the NQSO.

SARs. A participant will not recognize any taxable income at the time SARs are granted. The participant at the time of receipt will recognize as ordinary income the amount of cash and the fair market value of the common stock that he or she receives on exercise of the SAR. We generally will be entitled to a federal income tax deduction equal to the amount of ordinary income the participant recognizes on exercise of the SAR.

Restricted Stock Awards and RSUs. With regard to Restricted Stock Awards, a participant will recognize ordinary income on account of a Restricted Stock Award on the first day that the shares are either transferable or no longer subject to a substantial risk of forfeiture. The ordinary income recognized will equal the excess of the fair market value of the common stock on such date over the price, if any, paid for the stock. However, even if the shares under a Restricted Stock Award are both nontransferable and subject to a substantial risk of forfeiture, the participant may make a special "83(b) election" to recognize income, and have his or her tax consequences determined, as of the date of grant of the Restricted Stock Award. The participant's tax basis in the shares received under the Restricted Stock Award will equal the income recognized plus the price, if any, paid for the Restricted Stock Award. We generally will be entitled to a federal income tax deduction equal to the ordinary income the participant recognizes with respect to the Restricted Stock Award. With regard to RSUs, a participant will not recognize any taxable income at the time RSUs are granted. When the terms and conditions to which the RSUs are subject have been satisfied and the RSUs are settled, the participant will recognize as ordinary income the fair market value of the common stock he or she receives on settlement of the RSUs. We generally will be entitled to a federal income tax deduction equal to the ordinary income the participant recognizes on settlement of the RSUs.

Registration with the SEC

If the shareholders approve this proposal, we will file with the SEC, as soon as reasonably practicable after such approval, a registration statement on Form S-8 relating to the additional shares available for issuance under the 2023 Plan.

New Plan Benefits

A new plan benefits table for the 2023 Plan and the benefits or amounts that would have been received by or allocated to participants for the last completed fiscal year under the 2023 if the 2023 Plan was then in effect, as described in the federal proxy rules, are not provided because all awards made under the 2023 Plan will be made at the Compensation Committee's discretion, subject to the terms of the 2023 Plan. Therefore, the benefits and amounts that will be received or allocated under the 2023 Plan are not determinable at this time. However, please refer to the 2022 Summary Compensation Table in this Proxy Statement which sets forth certain information regarding awards granted to our NEOs during the last completed fiscal year.

Vote Required and Board Recommendation

The affirmative vote of a majority of the votes cast on the matter is required for the approval of this item. As this proposal is not considered a "routine item," your bank, broker, or other nominee cannot vote your shares without receiving your voting instructions. Abstentions and broker non-votes will have no effect on the vote.

THE BOARD UNANIMOUSLY RECOMMENDS THAT THE SHAREHOLDERS VOTE "FOR" THE APPROVAL OF THE 2023 PLAN.

CERTAIN MATTERS RELATING TO PROXY MATERIALS AND ANNUAL REPORTS

Electronic Access of Proxy Materials and Annual Reports

Our Proxy Statement, including the accompanying notice and form of proxy, and 2022 Annual Report are available at https://materials.proxyvote.com. A free paper copy of any of these documents may be requested by contacting the Corporate Secretary in writing at Precigen, Inc., 20374 Seneca Meadows Parkway, Germantown, Maryland 20876.

"Householding" of Proxy Materials and Annual Reports for Record Owners

The SEC rules permit us, with your permission, to deliver a single proxy statement and annual report to any household at which two or more shareholders of record reside at the same address. Each shareholder will continue to receive a separate proxy card. This procedure, known as "householding," reduces the volume of duplicate information you receive and reduces our expenses. Shareholders of record voting by mail can choose this option by marking the appropriate box on the proxy card included with this Proxy Statement. Shareholders of record voting via telephone or over the internet can choose this option by following the instructions provided by telephone or over the internet, as applicable. Once given, a shareholder's consent will remain in effect until he or she revokes it by notifying our Corporate Secretary as described above. If you revoke your consent, we will begin sending you individual copies of future mailings of these documents within 30 days after we receive your revocation notice. Shareholders of record who elect to participate in householding may also request a separate copy of future proxy statements and annual reports by writing to the Corporate Secretary at Precigen, Inc., 20374 Seneca Meadows Parkway, Germantown, Maryland 20876 or by phone on (301) 556-9900.

Separate Copies for Beneficial Owners

Institutions that hold shares in street name for two or more beneficial owners with the same address are permitted to deliver a single proxy statement and annual report to that address. Any such beneficial owner can request a separate copy of this Proxy Statement or the 2022 Annual Report by contacting our Corporate Secretary as described below. Beneficial owners with the same address who receive more than one Proxy Statement and 2022 Annual Report may request delivery of a single Proxy Statement and 2022 Annual Report by contacting the Corporate Secretary in writing at Precigen, Inc., 20374 Seneca Meadows Parkway, Germantown, Maryland 20876.

OTHER MATTERS

The Board is not aware of any other matters to be presented for action at the Annual Meeting other than as set forth in this Proxy Statement. However, if other matters properly come before the Annual Meeting, or any adjournment or postponement thereof, the person or persons voting the proxies will vote them in accordance with their best judgment.

By Order of the Board of Directors

DONALD P. LEHR Chief Legal Officer and Corporate Secretary

Germantown, Maryland April 25, 2023

PRECIGEN, INC. 2023 OMNIBUS INCENTIVE PLAN

- Section 1. *Purpose*. The purpose of the Precigen, Inc. 2023 Omnibus Incentive Plan (as amended from time to time, the "**Plan**") is to motivate and reward employees and other individuals to perform at the highest level and contribute significantly to the success of Precigen, Inc. (the "**Company**"), thereby furthering the best interests of the Company and its shareholders.
- Section 2. Definitions. As used in the Plan, the following terms shall have the meanings set forth below:
 - (a) "Affiliate" means any entity that, directly or indirectly through one or more intermediaries controls, is controlled by or is under common control with, the Company.
 - (b) "Award" means any Option, SAR, Restricted Stock, RSU, Performance Award, Other Cash-Based Award or Other Stock-Based Award granted under the Plan.
 - (c) "Award Agreement" means any agreement, contract or other instrument or document (including in electronic form) evidencing any Award granted under the Plan, which may, but need not, be executed or acknowledged by a Participant.
 - (d) "Beneficial Owner" has the meaning ascribed to such term in Rule 13d-3 under the Exchange Act.
 - (e) "Beneficiary" means a Person entitled to receive payments or other benefits or exercise rights that are available under the Plan in the event of a Participant's death. If no such Person can be named or is named by a Participant, or if no Beneficiary designated by a Participant is eligible to receive payments or other benefits or exercise rights that are available under the Plan at a Participant's death, such Participant's Beneficiary shall be such Participant's estate.
 - (f) "Board" means the Board of Directors of the Company.
 - (g) "Cause" has the meaning as such term is defined in any Service Agreement, except as otherwise determined by the Committee and set forth in the applicable Award Agreement. If no such Service Agreement exists or if such Service Agreement does not contain any such definition, except as otherwise determined by the Committee and set forth in the applicable Award Agreement, "Cause" means (i) the Participant's willful and continued failure to comply with the lawful directives of the Board or any supervisory personnel of the Participant, (ii) the material breach by the Participant of the terms of any confidentiality, non-competition, non-solicitation or other agreement that the Participant has with the Company or any Affiliate, (iii) one or more acts by the Participant of willful malfeasance or gross negligence, (iv) any commission of an act of fraud, embezzlement, theft, misappropriation or misuse by the Participant of the funds or property of the Company or any Affiliate, (v) any falsification by the Participant of any record or report in connection with the Participant's duties and obligations to the Company or any Affiliate, (vi) the breach by the Participant of any fiduciary duty against the Company or any Affiliate, (vii) the material breach by the Participant of any policy of the Company or any Affiliate, (viii) the Participant being indicted for a felony that has a material adverse effect on the property, operations, business or reputation of the Company or any Affiliate or being convicted of any other felony or plea of guilty or nolo contendre to any other felony or (ix) the Participant's possession, use or sale of illegal drugs, the abuse of alcohol or prescribed medication, or any other act or omission which the Company or an Affiliate considers to be a violation of federal, state or local law or regulations other than a simple traffic violation. For purposes of the Plan, other than where the definition of Cause is determined under any Service Agreement, in which case such Service Agreement shall control, in no event shall any termination of employment or service be deemed for Cause unless the Company's Legal Department (or in the case of a Participant who is an officer covered by Section 16 of the Exchange Act, the Committee) concludes that the situation warrants a determination that the Participant's employment or service be terminated for Cause; and in the case of the Chief Executive Officer or any member of the Board, any determination that the Chief Executive Officer's employment

or the Board member's service be terminated for Cause shall be made by the Board acting without the Chief Executive Officer or the Board member, as applicable.

- (h) "Change in Control" means the occurrence of any one or more of the following events:
- (i) The accumulation in any number of related or unrelated transactions by any Person of beneficial ownership (as such term is used in Rule 13d-3 promulgated under the Exchange Act) of more than fifty percent (50%) of the combined voting power of the Company's voting stock; provided that for purposes of this subsection (i), a Change in Control will not be deemed to have occurred if the accumulation of more than fifty percent (50%) of the voting power of the Company's voting stock results from any acquisition of voting stock (i) directly from the Company that is approved by the Incumbent Board, (ii) by the Company, (iii) by any employee benefit plan (or related trust) sponsored or maintained by the Company or any Affiliate, or (iv) by any Person pursuant to a merger, consolidation, reorganization or other transaction (a "Business Combination") that would not cause a Change in Control under subsections (ii), (iii) or (iv) below;
- (ii) The consummation of a Business Combination, unless, immediately following that Business Combination, (i) all or substantially all of the Persons who were the beneficial owners of the voting stock of the Company immediately prior to that Business Combination beneficially own, directly or indirectly, more than fifty percent (50%) of the then outstanding shares of common stock and more than fifty percent (50%) of the combined voting power of the then outstanding voting stock entitled to vote generally in the election of directors of the entity resulting from that Business Combination (including, without limitation, an entity that as a result of that Business Combination owns the Company or all or substantially all of the Company's assets either directly or through one or more subsidiaries) in substantially the same proportions relative to each other as their ownership, immediately prior to that Business Combination, of the voting stock of the Company;
 - (iii) A sale or other disposition of all or substantially all of the assets of the Company;
- (iv) Approval by the shareholders of the Company of a complete liquidation or dissolution of the Company; or
- (v) During any period of two consecutive years, the Incumbent Board ceases to constitute a majority of the Board.

Notwithstanding the foregoing, a Change in Control shall only be deemed to have occurred with respect to a Participant in connection with the time or form of payment of an Award that is subject to Section 409A of the Code (or as otherwise required for the 409A Award to be in compliance with Section 409A of the Code) if the Change in Control otherwise constitutes a change in the ownership or effective control of the Company, or in the ownership of a substantial portion of the assets of the Company, within the meaning of Section 409A of the Code.

- (i) "Code" means the Internal Revenue Code of 1986, as amended from time to time, and the rules, regulations and guidance thereunder. Any reference to a provision in the Code shall include any successor provision thereto.
- (j) "**Committee**" means the compensation committee of the Board unless another committee is designated by the Board. If there is no compensation committee of the Board and the Board does not designate another committee, references herein to the "Committee" shall refer to the Board.
- (k) "Consultant" means any individual, including an advisor, who is providing services to the Company or any Subsidiary or who has accepted an offer of service or consultancy from the Company or any Subsidiary.
 - (l) "Director" means any member of the Board.
- (m) "**Effective Date**" means the date on which the Plan is adopted by the Board and approved by the shareholders of the Company.

- (n) "Employee" means any individual, including any officer, employed by the Company or any Subsidiary or any prospective employee or officer who has accepted an offer of employment from the Company or any Subsidiary, with the status of employment determined based upon such factors as are deemed appropriate by the Committee in its discretion, subject to any requirements of the Code or applicable laws.
- (o) "Exchange Act" means the Securities Exchange Act of 1934, as amended from time to time, and the rules, regulations and guidance thereunder. Any reference to a provision in the Exchange Act shall include any successor provision thereto.
- (p) "Fair Market Value" means (i) with respect to Shares, the closing price of a Share on the applicable date of determination (or, if there is no reported sale on such date, on the last preceding date on which any reported sale occurred), on the principal stock market or exchange on which the Shares are quoted or traded, or if Shares are not so quoted or traded, the fair market value of a Share as determined by the Committee, and (ii) with respect to any property other than Shares, the fair market value of such property determined by such methods or procedures as shall be established from time to time by the Committee.
- (q) "**Incentive Stock Option**" means an option representing the right to purchase Shares from the Company, granted pursuant to Section 6, that meets the requirements of Section 422 of the Code.
- (r) "Incumbent Board" means at least a majority of the members of the Board consisting of individuals who either are (a) members of the Board at the beginning of any period of two consecutive years or (b) members who become members of the Board subsequent to such time whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds (2/3) of the directors then comprising such Incumbent Board (either by a specific vote or by approval of the proxy statement of the Company in which that person is named as a nominee for director, without objection to that nomination), but excluding, for that purpose, any individual whose initial assumption of office occurs as a result of an actual or threatened election contest (within the meaning of Rule 14a-11 of the Exchange Act) with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board.
- (s) "**Intrinsic Value**" with respect to an Option or SAR Award means (i) the excess, if any, of the price or implied price per Share in a Change in Control or other event *over* (ii) the exercise or hurdle price of such Award *multiplied by* (iii) the number of Shares covered by such Award.
- (t) "Non-Qualified Stock Option" means an option representing the right to purchase Shares from the Company, granted pursuant to Section 6, that is not an Incentive Stock Option.
 - (u) "Option" means an Incentive Stock Option or a Non-Qualified Stock Option.
- (v) "Other Cash-Based Award" means an Award granted pursuant to Section 11, including cash awarded as a bonus or upon the attainment of specified performance criteria or otherwise as permitted under the Plan.
- (w) "Other Stock-Based Award" means an Award granted pursuant to Section 11 that may be denominated or payable in, valued in whole or in part by reference to, or otherwise based on, or related to, Shares or factors that may influence the value of Shares, including convertible or exchangeable debt securities, other rights convertible or exchangeable into Shares, purchase rights for Shares, dividend rights or dividend equivalent rights or Awards with value and payment contingent upon performance of the Company or business units thereof or any other factors designated by the Committee.
 - (x) "Participant" means the recipient of an Award granted under the Plan.
 - (y) "Performance Award" means an Award granted pursuant to Section 10.
- (z) "**Performance Period**" means the period established by the Committee with respect to any Performance Award during which the performance goals specified by the Committee with respect to such Award are to be measured.

- (aa) "**Person**" has the meaning ascribed to such term in Section 3(a)(9) of the Exchange Act and used in Sections 13(d) and 14(d) thereof, including a "group" as defined in Section 13(d) thereof.
- (bb) "**Prior Plan**" means the Intrexon Corporation Amended and Restated 2013 Omnibus Incentive Plan (as amended from time to time).
- (cc) "**Prior Plan Award**" means any award previously granted under the Prior Plan that is outstanding as of the Effective Date.
- (dd) "**Restricted Stock**" means any Share subject to certain restrictions and forfeiture conditions, granted pursuant to Section 8.
- (ee) "RSU" means a contractual right granted pursuant to Section 9 that is denominated in Shares. Each RSU represents a right to receive the value of one Share (or a percentage of such value) in cash, Shares or a combination thereof. Awards of RSUs may include the right to receive dividend equivalents.
- (ff) "SAR" means a right granted pursuant to Section 7 to receive upon exercise by the Participant or settlement, in cash, Shares or a combination thereof, the excess of (i) the Fair Market Value of one Share on the date of exercise or settlement over (ii) the exercise or hurdle price of the right on the date of grant.
- (gg) "Service Agreement" means any employment, service, severance, consulting or similar agreement between the Company or any of its Subsidiaries and a Participant.
 - (hh) "Share" means a share of the Company's common stock, no par value.
- (ii) "Subsidiary" means an entity of which the Company directly or indirectly holds all or a majority of the value of the outstanding equity interests of such entity or a majority of the voting power with respect to the voting securities of such entity. Whether employment by or service with a Subsidiary is included within the scope of the Plan shall be determined by the Committee.
- (jj) "Substitute Award" means an Award granted in assumption of, or in substitution for, an outstanding award previously granted by a company or other business acquired by the Company or with which the Company combines.
- (kk) "Termination of Service" means, in the case of a Participant who is an Employee, cessation of the employment relationship such that the Participant is no longer an employee of the Company or any Subsidiary, or, in the case of a Participant who is a Consultant, non-employee Director or other service provider, the date the performance of services for the Company or any Subsidiary has ended; provided, however, that, unless the Committee determines otherwise, in the case of a Participant who is an Employee, the transfer of employment from the Company to a Subsidiary, from a Subsidiary to the Company, from one Subsidiary to another Subsidiary, or the cessation of employee status but the continuation of the performance of services for the Company or a Subsidiary as a Director or Consultant shall not be deemed a cessation of service that would constitute a Termination of Service; provided, further, that, unless the Committee determines otherwise, a Termination of Service shall be deemed to occur for a Participant employed by, or performing services for, a Subsidiary when such Subsidiary ceases to be a Subsidiary unless such Participant's employment or service continues with the Company or another Subsidiary. Notwithstanding the foregoing, with respect to any Award subject to Section 409A of the Code (and not exempt therefrom), a Termination of Service occurs when a Participant experiences a "separation of service" (as such term is defined under Section 409A of the Code).

Section 3. Eligibility.

- (a) Any Employee, non-employee Director or Consultant shall be eligible to be selected to receive an Award under the Plan, to the extent that an offer or receipt of an Award is permitted by applicable law, stock market or exchange rules and regulations or accounting or tax rules and regulations.
- (b) Holders of equity compensation awards granted by a company that is acquired by the Company (or whose business is acquired by the Company) or with which the Company combines are

eligible for grants of Substitute Awards under the Plan to the extent permitted under applicable regulations of any stock exchange on which the Company is listed.

Section 4. Administration.

- (a) *Administration of the Plan*. The Plan shall be administered by the Committee. All decisions of the Committee shall be final, conclusive and binding upon all parties, including the Company, its shareholders, Participants and any Beneficiaries thereof. The Committee may issue rules and regulations for administration of the Plan.
- (b) *Delegation of Authority*. To the extent permitted by applicable law, the Committee may delegate to one or more officers of the Company some or all of its authority under the Plan, including the authority to grant Options and SARs or other Awards in the form of Share rights (except that such delegation shall not apply to any Award for a Person then covered by Section 16 of the Exchange Act), and the Committee may delegate to one or more committees of the Board (which may consist of solely one Director) some or all of its authority under the Plan, including the authority to grant all types of Awards, in accordance with applicable law.
- (c) *Authority of Committee*. Subject to the terms of the Plan and applicable law, the Committee (or its delegate) shall have full discretion and authority to:
 - (i) designate Participants;
 - (ii) determine the type or types of Awards (including Substitute Awards) to be granted to each Participant under the Plan;
 - (iii) determine the number of Shares to be covered by (or with respect to which payments, rights or other matters are to be calculated in connection with) Awards;
 - (iv) determine the terms and conditions of any Award and prescribe the form of each Award Agreement, which need not be identical for each Participant;
 - (v) determine whether, to what extent, under what circumstances and by which methods Awards may be settled or exercised in cash, Shares, other Awards, other property, net settlement (including broker-assisted cashless exercise or sell-to-cover), or any combination thereof, or canceled, forfeited or suspended;
 - (vi) determine whether, to what extent and under what circumstances cash, Shares, other Awards, other property and other amounts payable with respect to an Award under the Plan shall be deferred either automatically or at the election of the holder thereof or of the Committee;
 - (vii) amend terms or conditions of any outstanding Awards;
 - (viii) correct any defect, supply any omission and reconcile any inconsistency in the Plan or any Award, in the manner and to the extent it shall deem desirable to carry the Plan into effect;
 - (ix) interpret and administer the Plan and any instrument or agreement relating to, or Award made under, the Plan;
 - (x) establish, amend, suspend or waive such rules and regulations and appoint such agents, trustees, brokers, depositories and advisors and determine such terms of their engagement as it shall deem appropriate for the proper administration of the Plan and due compliance with applicable law, stock market or exchange rules and regulations or accounting or tax rules and regulations; and
 - (xi) make any other determination and take any other action that the Committee deems necessary or desirable for the administration of the Plan and due compliance with applicable law, stock market or exchange rules and regulations or accounting or tax rules and regulations.

Notwithstanding anything to the contrary contained herein, the Board may, in its sole discretion, at any time and from time to time, grant Awards or administer the Plan. In any such case, the Board shall have all of the authority and responsibility granted to the Committee herein.

Section 5. Shares Available for Awards.

- (a) Subject to adjustment as provided in Section 5(c) and except for Substitute Awards, the maximum number of Shares available for issuance under the Plan shall not exceed in the aggregate the sum of (i) 12,500,000 Shares and (ii) the total number of Shares remaining available for issuance under the Prior Plan as of the Effective Date. Shares underlying Substitute Awards and Shares remaining available for grant under a plan of an acquired company or of a company with which the Company combines (whether by way of amalgamation, merger, sale and purchase of shares or other securities or otherwise), appropriately adjusted to reflect the acquisition or combination transaction, shall not reduce the number of Shares remaining available for grant hereunder.
- (b) If any Award or Prior Plan Award is forfeited, cancelled, expires, terminates or otherwise lapses or is settled in cash, in whole or in part, without the delivery of Shares, then the Shares covered by such forfeited, expired, terminated or lapsed Award shall again be available for grant under the Plan. For the avoidance of doubt, the following shall become available for issuance under the Plan: (i) any Shares withheld in respect of taxes relating to any Award or Prior Plan Award and (ii) any Shares tendered or withheld to pay the exercise price of Options or SARs (including any stock options or stock appreciation rights that are Prior Plan Awards).
- (c) In the event that the Committee determines that, as a result of any dividend or other distribution (other than an ordinary dividend or distribution), recapitalization, stock split (stock subdivision), reverse stock split (stock consolidation), reorganization, merger, amalgamation, consolidation, separation, rights offering, split-up, spin-off, combination, repurchase or exchange of Shares or other securities of the Company, issuance of warrants or other rights to acquire Shares or other securities of the Company, issuance of Shares pursuant to the anti-dilution provisions of securities of the Company, or other similar corporate transaction or event affecting the Shares, or of changes in applicable laws, regulations or accounting principles, an adjustment is necessary in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan, then the Committee shall, subject to Section 20 and applicable law, adjust equitably so as to ensure no undue enrichment or harm (including by payment of cash), any or all of:
 - (i) the number and type of Shares (or other securities) which thereafter may be made the subject of Awards, including the aggregate limits specified in Section 5(a) and Section 5(f);
 - (ii) the number and type of Shares (or other securities) subject to outstanding Awards;
 - (iii) the grant, acquisition, exercise or hurdle price with respect to any Award or, if deemed appropriate, make provision for a cash payment to the holder of an outstanding Award; and
 - (iv) the terms and conditions of any outstanding Awards, including the performance criteria of any Performance Awards;

provided, *however*, that the number of Shares subject to any Award denominated in Shares shall always be a whole number.

- (d) Any Shares delivered pursuant to an Award may consist, in whole or in part, of authorized and unissued Shares or Shares acquired by the Company.
- (e) A Participant who is a non-employee Director may not receive compensation for any calendar year in excess of \$750,000 (or \$1,000,000 for the year in which a non-employee Director is first elected or appointed to the Board) in the aggregate, including cash payments and Awards. For purposes of applying the limitation in this Section 5(e), Awards will be considered compensation in the calendar year in which the date of grant occurs and the value of such Award shall be its grant date fair value for financial reporting purposes.
- (f) Subject to adjustment as provided in Section 5(c)(i), the maximum number of Shares available for issuance with respect to Incentive Stock Options shall be 12,500,000.

- Section 6. *Options*. The Committee is authorized to grant Options to Participants with the following terms and conditions and with such additional terms and conditions, in either case not inconsistent with the provisions of the Plan, as the Committee shall determine:
 - (a) The exercise price per Share under an Option shall be determined by the Committee at the time of grant; *provided*, *however*, that, except in the case of Substitute Awards, such exercise price shall not be less than the Fair Market Value of a Share on the date of grant of such Option.
 - (b) The term of each Option shall be fixed by the Committee but shall not exceed 10 years from the date of grant of such Option. Subject to Section 13, the Committee shall determine the time or times at which an Option becomes vested and exercisable in whole or in part.
 - (c) The Committee shall determine the methods by which, and the forms in which payment of the exercise price with respect thereto may be made or deemed to have been made, including cash, Shares, other Awards, other property, net settlement (including broker-assisted cashless exercise) or any combination thereof, having a Fair Market Value on the exercise date equal to the relevant exercise price.
 - (d) The Committee may, in its discretion, specify in the applicable Award Agreement that to the extent an Option is not previously exercised as to all of the Shares subject thereto, and, if the Fair Market Value of one Share is greater than the exercise price then in effect, then the Option shall be deemed automatically exercised immediately before its expiration.
 - (e) No grant of Options may be accompanied by a tandem award of dividend equivalents or provide for dividends, dividend equivalents or other distributions to be paid on such Options (except as provided under Section 5(c)).
 - (f) The terms of any Incentive Stock Option granted under the Plan shall comply in all respects with the provisions of Section 422 of the Code. Incentive Stock Options may be granted only to employees of the Company or of a parent or subsidiary corporation (as defined in Section 424 of the Code). Notwithstanding any designation as an Incentive Stock Option, to the extent that the aggregate Fair Market Value of Shares subject to a Participant's incentive stock options that become exercisable for the first time during any calendar year exceeds \$100,000, such excess Options shall be treated as Non-Qualified Stock Options. For purposes of the foregoing, Incentive Stock Options shall be taken into account in the order in which they were granted, and the Fair Market Value of the Shares shall be determined as of the date of the grant of such Option. No Incentive Stock Options may be issued more than ten years following the earlier of (i) the date of adoption of the Plan or (ii) the most recent date of approval of the Plan by the shareholders of the Company.
- Section 7. *Stock Appreciation Rights*. The Committee is authorized to grant SARs to Participants with the following terms and conditions and with such additional terms and conditions, in either case not inconsistent with the provisions of the Plan, as the Committee shall determine:
 - (a) SARs may be granted under the Plan to Participants either alone ("freestanding") or in addition to other Awards granted under the Plan ("tandem") and may, but need not, relate to a specific Option granted under Section 6.
 - (b) The exercise or hurdle price per Share under a SAR shall be determined by the Committee; *provided*, *however*, that, except in the case of Substitute Awards, such exercise or hurdle price shall not be less than the Fair Market Value of a Share on the date of grant of such SAR.
 - (c) The term of each SAR shall be fixed by the Committee but shall not exceed 10 years from the date of grant of such SAR. Subject to Section 13, the Committee shall determine the time or times at which a SAR may be exercised or settled in whole or in part.
 - (d) Upon the exercise of a SAR, the Company shall pay to the Participant an amount equal to the number of Shares subject to the SAR multiplied by the excess, if any, of the Fair Market Value of one Share on the exercise date over the exercise or hurdle price of such SAR. The Company shall pay such excess in cash, in Shares valued at Fair Market Value, or any combination thereof, as determined by the Committee.

- (e) The Committee may, in its discretion, specify in the applicable Award Agreement that to the extent a SAR is not previously exercised as to all of the Shares subject thereto, and, if the Fair Market Value of one Share is greater than the exercise price then in effect, then the SAR shall be deemed automatically exercised immediately before its expiration.
- (f) No grant of SARs may be accompanied by a tandem award of dividend equivalents or provide for dividends, dividend equivalents or other distributions to be paid on such SARs (except as provided under Section 5(c)).
- Section 8. *Restricted Stock*. The Committee is authorized to grant Awards of Restricted Stock to Participants with the following terms and conditions and with such additional terms and conditions, in either case not inconsistent with the provisions of the Plan, as the Committee shall determine:
 - (a) The Award Agreement shall specify the vesting schedule.
 - (b) Awards of Restricted Stock shall be subject to such restrictions as the Committee may impose, which restrictions may lapse separately or in combination at such time or times, in such installments or otherwise, as the Committee may deem appropriate.
 - (c) Subject to the restrictions set forth in the applicable Award Agreement, a Participant generally shall have the rights and privileges of a shareholder with respect to Awards of Restricted Stock, including the right to vote such Shares of Restricted Stock and the right to receive dividends.
 - (d) The Committee may, in its discretion, specify in the applicable Award Agreement that an Award of Restricted Stock shall convey the right to receive dividend equivalents on the Shares subject to such Award with respect to any dividends or other distributions declared during the period that such Award is outstanding, in which case, such dividend equivalent rights shall accumulate and shall be paid in cash or Shares on the settlement date of the Award, subject to the vesting of the Award (or portion thereof) with respect to which such dividend equivalents are credited. For the avoidance of doubt, any dividend equivalents in respect of any Award of Restricted Stock shall have the same vesting conditions and vesting dates and shall be paid in accordance with the same terms as the Award to which they relate.
 - (e) Any Award of Restricted Stock may be evidenced in such manner as the Committee may deem appropriate, including book-entry registration.
 - (f) The Committee may provide in an Award Agreement that an Award of Restricted Stock is conditioned upon the Participant making or refraining from making an election with respect to the Award under Section 83(b) of the Code. If a Participant makes an election pursuant to Section 83(b) of the Code with respect to an Award of Restricted Stock, such Participant shall be required to file promptly a copy of such election with the Company and the applicable Internal Revenue Service office.
- Section 9. *RSUs*. The Committee is authorized to grant Awards of RSUs to Participants with the following terms and conditions and with such additional terms and conditions, in either case not inconsistent with the provisions of the Plan, as the Committee shall determine:
 - (a) The Award Agreement shall specify the vesting schedule and the delivery schedule (which may include deferred delivery later than the vesting date).
 - (b) Awards of RSUs shall be subject to such restrictions as the Committee may impose, which restrictions may lapse separately or in combination at such time or times, in such installments or otherwise, as the Committee may deem appropriate.
 - (c) An RSU shall not convey to a Participant the rights and privileges of a shareholder with respect to the Share subject to such RSU, such as the right to vote or the right to receive dividends, unless and until and to the extent a Share is issued to such Participant to settle such RSU.
 - (d) The Committee may, in its discretion, provide in the applicable Award Agreement that an Award of RSUs shall convey the right to receive dividend equivalents on the Shares subject to such Award with respect to any dividends or other distributions declared during the period that such Award

is outstanding, in which case, such dividend equivalent rights shall accumulate and shall be paid in cash or Shares on the settlement date of the Award, subject to the vesting of the Award (or portion thereof) with respect to which such dividend equivalents are credited. For the avoidance of doubt, any dividend equivalents in respect of any Award of RSUs shall have the same vesting conditions and vesting dates and shall be paid in accordance with the same terms as the Award to which they relate.

- (e) Shares delivered upon the vesting and settlement of an RSU Award may be evidenced in such manner as the Committee may deem appropriate, including book-entry registration.
- (f) The Committee may determine the form or forms (including cash, Shares, other Awards, other property or any combination thereof) in which payment of the amount owing upon settlement of any RSU Award may be made.
- Section 10. *Performance Awards*. The Committee is authorized to grant Performance Awards to Participants with the following terms and conditions and with such additional terms and conditions, in either case not inconsistent with the provisions of the Plan, as the Committee shall determine:
 - (a) Performance Awards may be denominated as a cash amount, number of Shares or units or a combination thereof and are Awards that may be earned upon achievement or satisfaction of performance conditions specified by the Committee. In addition, the Committee may specify that any other Award shall constitute a Performance Award by conditioning the grant to a Participant or the right of a Participant to exercise the Award or have it settled, and the timing thereof, upon achievement or satisfaction of such performance conditions as may be specified by the Committee. The Committee may use such business criteria and other measures of performance as it may deem appropriate in establishing any performance conditions. Subject to the terms of the Plan, the performance goals to be achieved during any Performance Period, the length of any Performance Period, the amount of any Performance Award granted and the amount of any payment or transfer to be made pursuant to any Performance Award shall be determined by the Committee.
 - (b) Performance criteria may be measured on an absolute (*e.g.*, plan or budget) or relative basis, and may be established on a corporate-wide basis, with respect to one or more business units, divisions, Subsidiaries or business segments, or on an individual basis. If the Committee determines that a change in the business, operations, corporate structure or capital structure of the Company, or the manner in which the Company conducts its business, or other events or circumstances render the performance objectives unsuitable, the Committee may modify the performance objectives or the related minimum acceptable level of achievement, in whole or in part, as the Committee deems appropriate and equitable such that it does not provide any undue enrichment or harm. Performance measures may vary from Performance Award to Performance Award and from Participant to Participant, and may be established on a stand-alone basis, in tandem or in the alternative. The Committee shall have the power to impose such other restrictions on Awards subject to this Section 10(b) as it may deem necessary or appropriate to ensure that such Awards satisfy all requirements of any applicable law, stock market or exchange rules and regulations or accounting or tax rules and regulations.
 - (c) Settlement of Performance Awards shall be in cash, Shares, other Awards, other property, net settlement, or any combination thereof, as determined in the discretion of the Committee.
 - (d) A Performance Award shall not convey to a Participant the rights and privileges of a shareholder with respect to the Share subject to such Performance Award, such as the right to vote (except as relates to Restricted Stock) or the right to receive dividends, unless and until and to the extent a Share is issued to such Participant to settle such Performance Award. The Committee, in its sole discretion, may provide that a Performance Award shall convey the right to receive dividend equivalents on the Shares subject to such Performance Award with respect to any dividends declared during the period that such Performance Award is outstanding, in which case, such dividend equivalent rights shall accumulate and shall be paid in cash or Shares on the settlement date of the Performance Award, subject to the Participant's earning of the Shares with respect to which such dividend equivalents are paid upon achievement or satisfaction of performance conditions specified by the Committee. Shares delivered upon the vesting and settlement of a Performance Award may be evidenced in such manner as the Committee may deem appropriate, including book-entry registration. For the avoidance of doubt,

unless otherwise determined by the Committee, no dividend equivalent rights shall be provided with respect to any Shares subject to Performance Awards that are not earned or otherwise do not vest or settle pursuant to their terms.

- (e) The Committee may, in its discretion, increase or reduce the amount of a settlement otherwise to be made in connection with a Performance Award.
- Section 11. Other Cash-Based Awards and Other Stock-Based Awards. The Committee is authorized, subject to limitations under applicable law, to grant Other Cash-Based Awards (either independently or as an element of or supplement to any other Award under the Plan) and Other Stock-Based Awards. The Committee shall determine the terms and conditions of such Awards. Shares delivered pursuant to an Award in the nature of a purchase right granted under this Section 11 shall be purchased for such consideration, and paid for at such times, by such methods and in such forms, including cash, Shares, other Awards, other property, net settlement, broker-assisted cashless exercise or any combination thereof, as the Committee shall determine; *provided* that the purchase price therefor shall not be less than the Fair Market Value of such Shares on the date of grant of such right.
 - Section 12. Effect of Termination of Service or a Change in Control on Awards.
 - (a) The Committee may provide, by rule or regulation or in any applicable Award Agreement, or may determine in any individual case, the circumstances in which, and the extent to which, an Award may be exercised, settled, vested, paid or forfeited in the event of a Participant's Termination of Service prior to the end of a Performance Period or vesting, exercise or settlement of such Award.
 - (b) Subject to the last sentence of Section 2(kk), the Committee may determine, in its discretion, whether, and the extent to which, (i) an Award will vest during a leave of absence, (ii) a reduction in service level (for example, from full-time to part-time employment) will cause a reduction, or other change, to an Award and (iii) a leave of absence or reduction in service will be deemed a Termination of Service.
 - (c) In the event of a Change in Control, the Committee may, in its sole discretion, and on such terms and conditions as it deems appropriate, take any one or more of the following actions with respect to any outstanding Award, which need not be uniform with respect to all Participants and/or Awards:
 - (i) continuation or assumption of such Award by the Company (if it is the surviving corporation) or by the successor or surviving entity or its parent;
 - (ii) substitution or replacement of such Award by the successor or surviving entity or its parent with cash, securities, rights or other property to be paid or issued, as the case may be, by the successor or surviving entity (or a parent or subsidiary thereof), with substantially the same terms and value as such Award (including any applicable performance targets or criteria with respect thereto);
 - (iii) acceleration of the vesting of such Award and the lapse of any restrictions thereon and, in the case of an Option or SAR Award, acceleration of the right to exercise such Award during a specified period (and the termination of such Option or SAR Award without payment of any consideration therefor to the extent such Award is not timely exercised), in each case, either (A) upon a Participant's involuntary Termination of Service (including upon a termination of the Participant's employment by the Company (or a successor corporation or its parent) without Cause, by a Participant for "good reason" and/or due to a Participant's death or "disability", as such terms may be defined in the applicable Award Agreement and/or a Participant's Service Agreement, as the case may be) on or within a specified period following the Change in Control or (B) if the successor or surviving entity (or its parent) fails to or otherwise does not continue or assume such Award;
 - (iv) in the case of a Performance Award, determination of the level of attainment of the applicable performance condition(s); and
 - (v) cancellation of such Award in consideration of a payment, with the form, amount and timing of such payment determined by the Committee in its sole discretion, subject to the

following: (A) such payment shall be made in cash, securities, rights and/or other property; (B) the amount of such payment shall equal the value of such Award, as determined by the Committee in its sole discretion; provided that, in the case of an Option or SAR Award, if such value equals the Intrinsic Value of such Award, such value shall be deemed to be valid; provided further that, if the Intrinsic Value of an Option or SAR Award is equal to or less than zero, the Committee may, in its sole discretion, provide for the cancellation of such Award without payment of any consideration therefor (for the avoidance of doubt, in the event of a Change in Control, the Committee may, in its sole discretion, terminate any Option or SAR Awards for which the exercise or hurdle price is equal to or exceeds the per Share value of the consideration to be paid in the Change in Control transaction without payment of consideration therefor); and (C) such payment shall be made promptly following such Change in Control or on a specified date or dates following such Change in Control; provided that the timing of such payment shall comply with Section 409A of the Code.

Section 13. *Minimum Vesting Requirements*. Notwithstanding anything to the contrary herein, and subject to Section 12, Awards shall vest over a period of not less than one year following the date of grant (the "Minimum Vesting Requirements"); *provided*, *however*, that the Committee may, in its sole discretion, (i) accelerate the vesting of Awards or otherwise lapse or waive the Minimum Vesting Requirements upon (A) the Participant's death or disability (as such term may be defined in the applicable Award Agreement and/or a Participant's Service Agreement, as the case may be) or (B) a Change in Control (subject to the requirements of Section 12) and (ii) grant Awards that are not subject to the Minimum Vesting Requirements with respect to 5% or less of the Shares available for issuance under the Plan (as set forth in Section 5(a), as may be adjusted pursuant to Section 5(c)).

Section 14. General Provisions Applicable to Awards.

- (a) Awards shall be granted for such cash or other consideration, if any, as the Committee determines; *provided* that in no event shall Awards be issued for less than such minimal consideration as may be required by applicable law.
- (b) Awards may, in the discretion of the Committee, be granted either alone or in addition to or in tandem with any other Award or any award granted under any other plan of the Company. Awards granted in addition to or in tandem with other Awards, or in addition to or in tandem with awards granted under any other plan of the Company, may be granted either at the same time as or at a different time from the grant of such other Awards or awards.
- (c) Subject to the terms of the Plan, payments or transfers to be made by the Company upon the grant, exercise or settlement of an Award may be made in the form of cash, Shares, other Awards, other property, net settlement, or any combination thereof, as determined by the Committee in its discretion at the time of grant, and may be made in a single payment or transfer, in installments or on a deferred basis, in each case in accordance with rules and procedures established by the Committee. Such rules and procedures may include provisions for the payment or crediting of reasonable interest on installment or deferred payments or the grant or crediting of dividend equivalents in respect of installment or deferred payments.
- (d) Except as may be permitted by the Committee or as specifically provided in an Award Agreement, (i) no Award and no right under any Award shall be assignable, alienable, saleable or transferable by a Participant other than by will or pursuant to Section 14(e) and (ii) during a Participant's lifetime, each Award, and each right under any Award, shall be exercisable only by such Participant or, if permissible under applicable law, by such Participant's guardian or legal representative. The provisions of this Section 14(d) shall not apply to any Award that has been fully exercised or settled, as the case may be, and shall not preclude forfeiture of an Award in accordance with the terms thereof.
- (e) A Participant may designate a Beneficiary or change a previous Beneficiary designation only at such times as prescribed by the Committee, in its sole discretion, and only by using forms and following procedures approved or accepted by the Committee for that purpose.
- (f) All certificates, if any, for Shares and/or other securities delivered under the Plan pursuant to any Award or the exercise or settlement thereof shall be subject to such stop transfer orders and other

restrictions as the Committee may deem advisable under the Plan or the rules, regulations and other requirements of the Securities and Exchange Commission, any stock market or exchange upon which such Shares or other securities are then quoted, traded or listed, and any applicable securities laws, and the Committee may cause a legend or legends to be put on any such certificates to make appropriate reference to such restrictions.

- (g) The Company will not be obligated to deliver any Shares under the Plan or remove restrictions from Shares previously delivered under the Plan until (i) all Award conditions have been met or removed to the Committee's satisfaction, (ii) as determined by the Committee, all other legal matters regarding the issuance and delivery of such Shares have been satisfied, including any applicable securities laws, stock market or exchange rules and regulations or accounting or tax rules and regulations and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Committee deems necessary or appropriate to satisfy any applicable laws. The Company's inability to obtain authority from any regulatory body having jurisdiction, which the Committee determines is necessary to the lawful issuance and sale of any Shares, will relieve the Company of any liability for failing to issue or sell such Shares as to which such requisite authority has not been obtained.
- (h) The Committee may impose restrictions on any Award with respect to non-competition, non-solicitation, confidentiality and other restrictive covenants, or requirements to comply with minimum share ownership requirements, as it deems necessary or appropriate in its sole discretion, which such restrictions may be set forth in any applicable Award Agreement or otherwise.

Section 15. Amendments and Terminations.

- (a) Amendment or Termination of the Plan. Except to the extent prohibited by applicable law and unless otherwise expressly provided in an Award Agreement or in the Plan, the Board may amend, alter, suspend, discontinue or terminate the Plan or any portion thereof at any time; provided, however, that no such amendment, alteration, suspension, discontinuation or termination shall be made without (i) shareholder approval if such approval is required by applicable law or the rules of the stock market or exchange, if any, on which the Shares are principally quoted or traded or (ii) subject to Section 5(c) and Section 12, the consent of the affected Participant, if such action would materially adversely affect the rights of such Participant under any outstanding Award, except (x) to the extent any such amendment, alteration, suspension, discontinuance or termination is made to cause the Plan to comply with applicable law, stock market or exchange rules and regulations or accounting or tax rules and regulations or (y) to impose any "clawback" or recoupment provisions on any Awards (including any amounts or benefits arising from such Awards) in accordance with Section 19. Notwithstanding anything to the contrary in the Plan, the Committee may amend the Plan, or create sub-plans, in such manner as may be necessary or desirable to enable the Plan to achieve its stated purposes in any jurisdiction in a tax-efficient manner and in compliance with local rules and regulations.
- (b) *Terms of Awards*. The Committee may waive any conditions or rights under, amend any terms of, or amend, alter, suspend, discontinue or terminate any Award theretofore granted (including by substituting another Award of the same or a different type), prospectively or retroactively, without the consent of any relevant Participant or holder or Beneficiary of an Award; *provided, however*, that, subject to Section 5(c) and Section 12, no such action shall materially adversely affect the rights of any affected Participant or holder or Beneficiary under any Award theretofore granted under the Plan, except (x) to the extent any such action is made to cause the Plan or Award to comply with applicable law, stock market or exchange rules and regulations or accounting or tax rules and regulations, or (y) to impose any "clawback" or recoupment provisions on any Awards (including any amounts or benefits arising from such Awards) in accordance with Section 19. The Committee shall be authorized to make adjustments in the terms and conditions of, and the criteria included in, Awards in recognition of events (including the events described in Section 5(c)) affecting the Company, or the financial statements of the Company, or of changes in applicable laws, regulations or accounting principles, whenever the Committee determines that such adjustments are appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan.
- (c) *No Repricing*. Except as provided in Section 5(c), the Committee may not, without shareholder approval, seek to effect any re-pricing of any previously granted "underwater" Option,

SAR or similar Award by: (i) amending or modifying the terms of the Option, SAR or similar Award to lower the exercise price; (ii) cancelling the underwater Option, SAR or similar Award and granting either (A) replacement Options, SARs or similar Awards having a lower exercise price or (B) Restricted Shares, RSUs, Performance Awards or Other Share-Based Awards in exchange; or (iii) cancelling or repurchasing the underwater Options, SARs or similar Awards for cash or other securities. An Option, SAR or similar Award will be deemed to be "underwater" at any time when the Fair Market Value of the Shares covered by such Award is less than the exercise price of the Award.

Section 16. Miscellaneous.

- (a) No Employee, Consultant, non-employee Director, Participant, or other Person shall have any claim to be granted any Award under the Plan, and there is no obligation for uniformity of treatment of employees, Participants or holders or Beneficiaries of Awards under the Plan. The terms and conditions of Awards need not be the same with respect to each recipient. Any Award granted under the Plan shall be a one-time Award that does not constitute a promise of future grants. The Company, in its sole discretion, maintains the right to make available future grants under the Plan.
- (b) The grant of an Award shall not be construed as giving a Participant the right to be retained in the employ of, or to continue to provide services to, the Company or any Affiliate. Further, the Company or any applicable Affiliate may at any time dismiss a Participant, free from any liability, or any claim under the Plan, unless otherwise expressly provided in the Plan or in any Award Agreement or in any other agreement binding on the parties. The receipt of any Award under the Plan is not intended to confer any rights on the receiving Participant except as set forth in the applicable Award Agreement.
- (c) No payment pursuant to the Plan shall be taken into account in determining any benefits under any severance, pension, retirement, savings, profit sharing, group insurance, welfare or other benefit plan of the Company or any Affiliate, except to the extent otherwise expressly provided in writing in such other plan or an agreement thereunder.
- (d) Nothing contained in the Plan shall prevent the Company or any Affiliate from adopting or continuing in effect other or additional compensation arrangements, including the grant of options and other stock-based awards, and such arrangements may be either generally applicable or applicable only in specific cases.
- (e) The Company shall be authorized to withhold from any Award granted or any payment due or transfer made under any Award or under the Plan or from any compensation or other amount owing to a Participant the amount (in cash, Shares, other Awards, other property, net settlement, or any combination thereof) of applicable withholding taxes due in respect of an Award, its exercise or settlement or any payment or transfer under such Award or under the Plan and to take such other action (including providing for elective payment of such amounts in cash or Shares by such Participant) as may be necessary to satisfy all obligations for the payment of such taxes and, unless otherwise determined by the Committee in its discretion, to the extent such withholding would not result in liability classification of such Award (or any portion thereof) pursuant to FASB ASC Subtopic 718-10.
- (f) If any provision of the Plan or any Award Agreement is or becomes or is deemed to be invalid, illegal or unenforceable in any jurisdiction, or as to any Person or Award, or would disqualify the Plan or any Award under any law deemed applicable by the Committee, such provision shall be construed or deemed amended to conform to applicable laws, or if it cannot be so construed or deemed amended without, in the determination of the Committee, materially altering the intent of the Plan or the Award Agreement, such provision shall be stricken as to such jurisdiction, Person or Award, and the remainder of the Plan and any such Award Agreement shall remain in full force and effect.
- (g) Neither the Plan nor any Award shall create or be construed to create a trust or separate fund of any kind or a fiduciary relationship between the Company and a Participant or any other Person. To the extent that any Person acquires a right to receive payments from the Company pursuant to an Award, such right shall be no greater than the right of any unsecured general creditor of the Company.
- (h) No fractional Shares shall be issued or delivered pursuant to the Plan or any Award, and the Committee shall determine whether cash or other securities shall be paid or transferred in lieu of any

fractional Shares, or whether such fractional Shares or any rights thereto shall be canceled, terminated or otherwise eliminated.

- (i) Awards may be granted to Participants who are non-United States nationals or employed or providing services outside the United States, or both, on such terms and conditions different from those applicable to Awards to Participants who are employed or providing services in the United States as may, in the judgment of the Committee, be necessary or desirable to recognize differences in local law, tax policy or custom. The Committee also may impose conditions on the exercise or vesting of Awards in order to minimize the Company's obligation with respect to tax equalization for Participants on assignments outside their home country.
- Section 17. *Effective Date of the Plan*. The Plan shall be effective as of the Effective Date.
- Section 18. *Term of the Plan*. No Award shall be granted under the Plan after the earliest to occur of (i) the 10-year anniversary of the Effective Date; (ii) the maximum number of Shares available for issuance under the Plan have been issued; or (iii) the Board terminates the Plan in accordance with Section 15(a). However, unless otherwise expressly provided in the Plan or in an applicable Award Agreement, any Award theretofore granted may extend beyond such date, and the authority of the Committee to amend, alter, adjust, suspend, discontinue or terminate any such Award, or to waive any conditions or rights under any such Award, and the authority of the Board to amend the Plan, shall extend beyond such date.

Section 19. Cancellation or "Clawback" of Awards.

- (a) The Committee may specify in an Award Agreement that a Participant's rights, payments and benefits with respect to an Award shall be subject to reduction, cancellation, forfeiture or recoupment upon the occurrence of certain specified events, in addition to any otherwise applicable vesting or performance conditions of an Award. Such events may include a Termination of Service with or without Cause (and, in the case of any Cause that is resulting from an indictment or other non-final determination, the Committee may provide for such Award to be held in escrow or abeyance until a final resolution of the matters related to such event occurs, at which time the Award shall either be reduced, cancelled or forfeited (as provided in such Award Agreement) or remain in effect, depending on the outcome), violation of material policies, breach of non-competition, non-solicitation, confidentiality or other restrictive covenants, or requirements to comply with minimum share ownership requirements, that may apply to the Participant, or other conduct by the Participant that is detrimental to the business or reputation of the Company and/or its Affiliates.
- (b) The Committee shall have full authority to implement any policies and procedures necessary to comply with Section 10D of the Exchange Act and any related listing standards rules promulgated thereunder and any other regulatory regimes. Notwithstanding anything to the contrary contained herein, any Awards granted under the Plan (including any amounts or benefits arising from such Awards) shall be subject to any clawback or recoupment arrangements or policies the Company has in place from time to time, and the Committee may, to the extent permitted by applicable law and stock exchange rules or by any applicable Company policy or arrangement, and shall, to the extent required, cancel or require reimbursement of any Awards granted to the Participant or any Shares issued or cash received upon vesting, exercise or settlement of any such Awards or sale of Shares underlying such Awards.

Section 20. Section 409A of the Code. With respect to Awards subject to Section 409A of the Code, the Plan is intended to comply with the requirements of Section 409A of the Code, and the provisions of the Plan and any Award Agreement shall be interpreted in a manner that satisfies the requirements of Section 409A of the Code, and the Plan shall be operated accordingly. If any provision of the Plan or any term or condition of any Award would otherwise frustrate or conflict with this intent, the provision, term or condition shall be interpreted and deemed amended so as to avoid this conflict. Notwithstanding anything in the Plan to the contrary, if the Board considers a Participant to be a "specified employee" under Section 409A of the Code at the time of such Participant's "separation from service" (as defined in Section 409A of the Code), and any amount hereunder is "deferred compensation" subject to Section 409A of the Code, any distribution of such amount that otherwise would be made to such Participant with respect to an Award as a result of such "separation from service" shall not be made until the date that is six months after such "separation from service," except to the extent that earlier distribution would not result

in such Participant's incurring interest or additional tax under Section 409A of the Code. If an Award includes a "series of installment payments" (within the meaning of Section 1.409A-2(b)(2)(iii) of the Treasury Regulations), a Participant's right to such series of installment payments shall be treated as a right to a series of separate payments and not as a right to a single payment, and if an Award includes "dividend equivalents" (within the meaning of Section 1.409A-3(e) of the Treasury Regulations), a Participant's right to such dividend equivalents shall be treated separately from the right to other amounts under the Award. Notwithstanding the foregoing, the tax treatment of the benefits provided under the Plan or any Award Agreement is not warranted or guaranteed, and in no event shall the Company be liable for all or any portion of any taxes, penalties, interest or other expenses that may be incurred by a Participant on account of non-compliance with Section 409A of the Code.

Section 21. *Successors and Assigns*. The terms of the Plan shall be binding upon and inure to the benefit of the Company and any successor entity, including any successor entity contemplated by Section 12(c).

Section 22. *Data Protection*. In connection with the Plan, the Company or its Affiliates, as applicable, may need to process personal data (as such term, "personal information," "personally identifiable information," or any other term of comparable intent, is defined under applicable laws or regulations, in each case to the extent applicable) provided by the Participant to, or otherwise obtained by, the Company or its Affiliates, their respective third party service providers or others acting on the Company's or its Affiliates' behalf. Examples of such personal data may include, without limitation, the Participant's name, account information, social security number, tax number and contact information. The Company or its Affiliates may process such personal data for the performance of the contract with the Participant in connection with the Plan and in its legitimate business interests for all purposes relating to the operation and performance of the Plan, including but not limited to:

- (a) administering and maintaining Participant records;
- (b) providing the services described in the Plan;
- (c) providing information to future purchasers or merger partners of the Company or any Affiliate, or the business in which such Participant works; and
- (d) responding to public authorities, court orders and legal investigations and complying with law, as applicable.

The Company or its Affiliates may share the Participant's personal data with (i) Affiliates, (ii) trustees of any employee benefit trust, (iii) registrars, (iv) brokers, (v) third party administrators of the Plan, (vi) third party service providers acting on the Company's or its Affiliates' behalf to provide the services described above, (vii) future purchasers or merger partners (as described above) or (viii) regulators and others, as required by law or in order to provide the services described in the Plan.

If necessary, the Company or its Affiliates may transfer the Participant's personal data to any of the parties mentioned above in a country or territory that may not provide the same protection for the information as the Participant's home country. Any transfer of the Participant's personal data to recipients in a third country will be made subject to appropriate safeguards or applicable derogations provided for, and to the extent required, under applicable law. Further information on those safeguards or derogations can be obtained through, and other questions regarding this Section 22 may be directed to, the contact set forth in the applicable employee privacy notice or other privacy policy that previously has been made available by the Company or its applicable Affiliate to the Participant (as applicable, and as updated from time to time by the Company or its applicable Affiliate upon notice to the Participant, the "Employee Privacy Notice"). The terms set forth in this Section 22 are supplementary to the terms set forth in the Employee Privacy Notice (which, among other things, further describes the Company's and its Affiliates' processing activities, and the rights of the Participant, with respect to the Participant's personal data); provided that, in the event of any conflict between the terms of this Section 22 and the terms of the Employee Privacy Notice, the terms of this Section 22 shall govern and control in relation to the processing of such personal data in connection with the Plan

The Company will keep personal data collected in connection with the Plan for as long as necessary to operate the Plan or as necessary to comply with any legal or regulatory requirements.

A Participant has a right to (i) request access to and rectification or erasure of the personal data provided, (ii) request the restriction of the processing of his or her personal data, (iii) object to the processing of his or her personal data, (iv) receive the personal data provided to the Company and transmit such data to another party, and (v) to lodge a complaint with a supervisory authority.

Section 23. *Governing Law*. The Plan and each Award Agreement shall be governed by the laws of the State of Delaware, without application of the conflicts of law principles thereof.

PRECIGEN, INC. 20374 SENECA MEADOWS PARKWAY GERMANTOWN, MARYLAND 20876

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:



VOTE BY INTERNET

Before The Meeting - Go to www.proxyvote.com or scan the QR Barcode above

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Daylight Time on June 7, 2023. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/PGEN2023

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6903
Use any touch-tone telephone to transmit your voting instructions up until 11:59 P.M. Eastern Daylight Time on June 7, 2023. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL
Mark, sign and date your proxy card and return it in the postage-paid
envelope we have provided or return it to Vote Processing, c/o Broadridge,
51 Mercedes Way, Edgewood, NY 11717.

						V12393-P92615	KEEP THIS PO			
	THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.							RETURI	N THIS PO	RTION ONL
PRECIGEN	, INC.									
The Bo follow	pard of Directors recommends you ving:	ote FOR the								
1. (Company Proposal - Election of Directors									
Nominees:		For Against Abstain								
1	a. Randal Kirk		0	0	0	The Board of Directors recommends your Proposals 2, 3 and 4:	u vote FOR	For	Against	Abstain
1	b. Cesar Alvarez			0		2. Company Proposal – Ratify the appo	ointment of	0		
1	c. Steven Frank		0	0	0	public accounting firm for fiscal y December 31, 2023.	public accounting firm for fiscal year ending			
1	d. Vinita Gupta		0	0	0	Company Proposal - Advisory vote to appropriate compensation.	ove executive	0	0	0
1	e. Fred Hassan		0	0	0	Company Proposal - Approval of the Precig Omnibus Incentive Plan.	gen, Inc. 2023	0	0	0
1	f. Jeffrey Kindler			0	0	NOTE: In their discretion, the proxies are authorize	red to vote on			
1	g. Dean Mitchell		0	0	0	such other business as may properly come before or any adjournment thereof.	e the meeting			
1	h. Helen Sabzevari		0	0	0	You may attend the meeting and vote during the r the polls are open via the Internet. We recomme that you vote before the meeting even if you plan	and however			
1	i. James Turley		0	0	0	that you vote before the meeting even if you plan in the meeting. When voting, have the inform printed in the box marked by the arrow and follov	nation that is vinstructions.			
Please	sign exactly as your name(s) appear(s) her	eon. When sia	ning as at	tornev, exe	cutor, ac	dministrator, or other fiduciary, please give full title	as such. Joint			
owners	s should each sign personally. All holders m	ust sign. If a co	rporation	or partnersh	nip, plea	se sign in full corporate or partnership name by auth	orized officer.			
Signatu	re [PLEASE SIGN WITHIN BOX]	Date				Signature (Joint Owners)	Date			

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:

The Annual Report and Proxy Statement are available at www.proxyvote.com.

V12394-P92615

PRECIGEN, INC. Annual Meeting of Shareholders June 8, 2023, 9:00 AM EDT This proxy is solicited by the Board of Directors

The shareholder(s) hereby appoint(s) Helen Sabzevari and Donald P. Lehr, or either of them, as proxies, each with the power to appoint his/her substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common Stock of PRECIGEN, INC., that the shareholder(s) is/are entitled to vote at the Annual Meeting of Shareholders to be held at 9:00 AM EDT on June 8, 2023, via a live webcast at www.virtualshareholdermeeting.com/PGEN2023, and any adjournment or postponement thereof.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations.

Continued and to be signed on reverse side