

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-K/A
(Amendment No. 1)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2023

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to .

Commission file number
001-36042

PRECIGEN, INC.
(Exact Name of Registrant as Specified in Its Charter)

Virginia
(State or Other Jurisdiction of
Incorporation or Organization)

26-0084895
(I.R.S. Employer
Identification Number)

20374 Seneca Meadows Parkway
Germantown, Maryland 20876
(Address of Principal Executive Offices)

Registrant's telephone number, including area code: (301) 556-9900

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u>	<u>Trading Symbol(s)</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, No Par Value	PGEN	Nasdaq Global Select Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. Yes No

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). Yes No

As of June 30, 2023, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the registrant's common stock held by non-affiliates based upon the closing price of such shares on the Nasdaq Global Select Market on such date was approximately \$177.3 million.

As of April 26, 2024, 252,419,690 shares of common stock, no par value per share, were issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

None.

Auditor Name:
Deloitte & Touche LLP

Auditor Location:
Baltimore, MD.

Auditor Firm ID:
PCAOB ID #1288

EXPLANATORY NOTE TO FORM 10-K/A

Precigen, Inc., or the Company, is filing this Amendment No. 1 on Form 10-K/A, or this Form 10-K/A, to its Annual Report on Form 10-K for the fiscal year ended December 31, 2023, which was filed with the Securities and Exchange Commission on March 19, 2024, or the Original Form 10-K, for the sole purpose of including the information required by Part III of Form 10-K. This information was previously omitted from the Original Form 10-K in reliance on General Instruction G(3) to Form 10-K, which permits the information required by Part III to be incorporated by reference from our definitive proxy statement if such statement is filed no later than 120 days after our fiscal year-end. We are filing this Form 10-K/A to include Part III information in our Annual Report on Form 10-K because we will not file a definitive proxy statement containing this information within 120 days after the end of the fiscal year covered by the Original Form 10-K.

In accordance with, among other things, Rule 12b-15 under the Securities Exchange Act of 1934, as amended, each item of the Original Form 10-K that is amended by this Form 10-K/A is also restated in its entirety, and this Form 10-K/A is accompanied by currently dated certifications on Exhibits 31.1 and 31.2 by the Company's Principal Executive Officer and Principal Financial Officer, respectively (because no financial statements have been included in this Form 10-K/A, and this Form 10-K/A does not contain or amend any disclosure with respect to Items 307 and 308 of Regulation S-K, paragraphs 3, 4 and 5 of the certification have been omitted). This Form 10-K/A is being filed to: (i) delete the reference on the cover of the Original Form 10-K to the incorporation by reference information from the Company's definitive proxy statement, (ii) revise Part III, Items 10 through 14 of the Original Form 10-K to include information previously omitted from the Original Form 10-K and (iii) revise the Exhibit Index of the Original Form 10-K to reflect the filing of new certifications.

No attempt has been made in this Form 10-K/A to modify or update the other disclosures presented in the Original Form 10-K. The Amendment does not reflect events occurring after the filing of the Original Form 10-K or modify or update those disclosures that may be affected by subsequent events, other than as expressly indicated in this Form 10-K/A. Accordingly, this Form 10-K/A should be read in conjunction with the Original Form 10-K and the Company's other filings with the SEC.

Unless the context requires otherwise, references in this Form 10-K/A to "Precigen," "we," "us," and "our" refer to Precigen, Inc.

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PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Information About Our Directors

The following table identifies our current directors and sets forth certain information regarding the members of our board of directors, including their ages as of April 29, 2024, and years of tenure on our board of directors (the “Board”).

Name	Positions and Offices Held with Precigen	Director Since	Age
Randal Kirk	Executive Chairman of the Board	2008	70
Cesar Alvarez	Director, Chair of Nominating and Governance Committee	2008	76
Steven Frank	Director	2008	64
Vinita Gupta	Director, Member of Nominating and Governance Committee	2017	56
Fred Hassan	Director, Member of Compensation and Human Capital Management Committee	2016	78
Jeffrey Kindler	Chair of Audit Committee Member of Compensation and Human Capital Management Committee	2011	68
Dean Mitchell	Director, Member of Audit Committee	2009	68
Helen Sabzevari, Ph.D.	Director, Chief Executive Officer	2020	62
James Turley	Director, Lead Independent Director Chair of Compensation and Human Capital Management Committee	2014	68

The names and certain biographical information about our current directors, including each director’s business experience, director position held, information regarding involvement in certain legal or administrative proceeding, if applicable, and the director’s experiences, qualifications, attributes, or skills are set forth below.

Randal 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 Chief Executive Officer 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 Nasdaq 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 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 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 \$2.3 billion in revenues with 2,650 law professionals providing services in 47 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 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 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 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 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 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. Mr. Hassan served as a director of Prometheus Biosciences, Inc. (NASDAQ: RXDX) from May 2021 until its acquisition by Merck (NYSE: MRK) in June 2023. Mr. Hassan served as a director of Time Warner Inc. from October 2009 to June 2018 and a director of Amgen, Inc. (NASDAQ: AMGN) from July 2015 to May 2021. 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.

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 has served as a Board member since November 2011. He has served as the Chief Executive Officer of Centrexion Therapeutics, a privately held clinical stage biopharmaceutical company, since October 2013, as an Operating Partner at ARTIS Ventures, a leading venture capital firm, since April 2020, and as 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.

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.

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.

Dean 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. (NASDAQ: PRAX), in both cases as Chairman. Since 2012, he has served as a non-executive board member of ImmunoGen, Inc. (NASDAQ: 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 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, Ph.D. 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 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, since 2013, 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.

Executive Officers Who Are Not Directors

The following table identifies our executive officers, other than as otherwise noted above, and sets forth their current positions and years of tenure at Precigen, their ages as of April 29, 2024, and certain other demographic information.

Name	Positions and Offices Held with Precigen	Officer Since	Age
Harry Thomasian Jr.	Chief Financial Officer	2021	62
Donald P. Lehr	Chief Legal Officer	2011	49
Jeffrey Perez	Senior Vice President, Intellectual Property Affairs	2014	52
Rutul R. Shah	Chief Operating Officer	2022	43

Harry Thomasian Jr., age 62, 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 not-for-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 49, 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 52, 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 43, 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.

Board Committees

The Board maintains three standing committees: the Audit Committee; the Compensation and Human Capital Management Committee (“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 Gupta. Mr. Kindler is the chair of the Audit Committee. During 2023, the Audit Committee met 6 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 under Item 13. Certain Relationships and Related Transactions, and Director Independence—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.

Compensation Committee

The members of the Compensation Committee are Messrs. Hassan, Kindler, and Turley. Mr. Turley is the chair of the Compensation Committee. During 2023, the Compensation Committee met 2 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 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 under Item 13. Certain Relationships and Related Transactions, and Director Independence—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 under Item 11. Executive Compensation—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. Hassan. Mr. Alvarez is the chair of the Nominating and Governance Committee. During 2023, 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 under Item 13. Certain Relationships and Related Transactions, and Director Independence—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.

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 director 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. 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.

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 2023.

Item 11. Executive Compensation.

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 2023.

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 Form 10-K/A 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 2023, as well as the other individuals included in the Summary Compensation Table, are referred to throughout this Form 10-K/A 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 2023 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	Chief Operating Officer

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.”

As part of the goal setting process for 2023, the Compensation Committee approved a broad set of goals that included clinical and non-clinical development goals, business development goals and other corporate objectives designed to reward the executive officers for driving our key short-term corporate objectives. The Committee assessed the performance of the executive officers in February 2024 against the 2023 goals, and also performed a holistic review of company and individual performance in 2023, and made bonus determinations based on such assessment and review, as described in “Annual Short Term Incentive Awards” below.

For 2023, after taking into account the overall position of the Company and with a focus on retention, cash preservation, and the desire to enhance the equity ownership positions in the Company of our executive officers in order to further align the interests with those of shareholders, the Compensation Committee, with the assistance of its independent compensation consultant in assessing the competitive market and evaluating current executive pay practices, reviewed the base salaries of our executive officers and made annual short-term incentive awards, consisting of equity in lieu of cash, based on the Company’s performance. In addition, the Compensation Committee 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 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.

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
<i>Annual Compensation</i>		
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.
<i>Long-Term Compensation</i>		
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.
<i>Other Compensation</i>		
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.	Fair and competitive programs to provide for the health and well-being of executives and their families.

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 2023.

The following table sets forth the 2023 annualized base salaries for each of our NEOs.

Name	2023 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 2023, 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 2023 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 addition, the Compensation Committee performed a holistic review of company and individual performance, which contributed to its determination of payout amounts. Although a relatively small portion of certain goals were not achieved, the Committee concluded that the overall achievements of the executive team in 2023 far outweighed some of the goals that were not completely achieved. Overall, the Committee concluded that the following accomplishments supported this conclusion:

- Significant clinical progress was achieved across our principal pipeline, including AdenoVerse and UltraCAR-T, highlighted by the U.S. Food and Drug Administration (FDA) granting Breakthrough Therapy Designation for PRGN-2012 AdenoVerse immunotherapy for the treatment of recurrent respiratory papillomatosis (RRP), and the FDA's confirmation that the ongoing phase 1 / 2 study of PRGN-2012 will serve as pivotal for the purpose of filing an accelerated approval request for licensure.
- We regained exclusive rights to proven CAR-T targets, CD19 and BCMA, to enable unencumbered development and commercialization of UltraCAR-T.
- We also strengthened the Company's balance sheet through both the complete retirement of our convertible notes and raising approximately \$73 million of net proceeds from an underwritten public offering of the Company's common stock.
- The Company also took certain additional organizational steps to continue the Company's focus as a healthcare company.

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 100% of target, or 150% of Dr. Sabzevari's base salary and 40% of base salary for our other NEOs. Taking into consideration the continued focus on enhanced equity ownership by our executives, as well as cash preservation, the Compensation Committee also approved the short-term incentive bonuses to be paid 100% in fully-vested RSUs based on the grant date fair market value of the Company's shares, as reflected in the table below.

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	100%	\$ —	1,071,428	\$ 1,500,000
Harry Thomasian Jr.	40%	\$ 190,000	100%	\$ —	135,714	\$ 190,000
Donald P. Lehr	40%	\$ 230,000	100%	\$ —	164,285	\$ 230,000
Jeffrey Perez	40%	\$ 200,000	100%	\$ —	142,857	\$ 200,000
Rutul R. Shah	40%	\$ 164,000	100%	\$ —	117,142	\$ 164,000

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 year, the Compensation Committee made grants of long-term incentive awards to its executives for 2023 as noted below.

In early 2023, the Compensation Committee approved grants of stock options to Dr. Sabzevari and Messrs. Thomasian, Lehr, Perez, and Shah, each of which vests as to one-fourth of the award one year after the date of grant, with the balance of the award vesting in 36 successive equal monthly installments thereafter.

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 2023 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 2024, 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

The Compensation Committee consulted with its independent compensation consultant, Aon, to assist in the analysis of the Company's peer group to align with governance and market best practices in preparation for the 2023 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 biotechnology companies predominantly in Phase I/II clinical trials with some Phase III companies, market capitalization of \$100 million to \$1.4 billion and a headcount of 75 to 625 employees. These companies generally specialize in oncology, gene and/or cell 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 the following 21 companies:

Company Name				
Adaptimmune Therapeutics (ADAP)	Agenus (AGEN)	Allogene Therapeutics (ALLO)	Allovir (ALVR)	Atara Biotherapeutics (ATRA)
Caribou Biosciences, Inc. (CRBU)	Fate Therapeutics (FATE)	Gossamer Bio (GOSS)	Gritstone bio (GRTS)	IDEAYA Biosciences (IDYA)
ImmunityBio (IBRX)	Inovio Pharmaceuticals (INO)	Iovance Biotherapeutics (IOVA)	Lyell Immunopharma (LYEL)	PDS Biotechnology (PDSB)
Poseida Therapeutics (PSTX)	REGENXBIO (RGNX)	Sana Biotechnology (SANA)	Sangamo Therapeutics (SGMO)	VIR Biotechnology (VIR)
Xencor (XNCR)				

At the time the peer group for 2023 was proposed to the Compensation Committee, the peer group had the following median statistics:

Measure	50th Percentile	Precigen's Position
Market Capitalization	\$512 million	\$366.0 million (46th percentile)
Revenues	\$14.3 million	\$22.1 million (51st percentile)
Annualized 3-Year TSR	-40	% -32% (65th percentile)

In preparation for making 2023 compensation decisions, 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 to the prior year's peer group:

The following companies were removed from the 2022 peer group:

- NGM Biopharmaceutics (NGM)

- Precision Biosciences (DTIL)
- Revolution Medicines (RVMD)
- Sorrento Therapeutics (SRNE)
- TCR2 Therapeutics (TCRR)
- Vaccitech (VACC)
- VBI Vaccines (VBIV)

The following two companies were added to the 2023 peer group:

- Adaptimmune Therapeutics (ADAP)
- Allovir (ALVR)
- Gossamer Bio (GOSS)
- Immunity Bio (IBRX)
- PDS Biotechnology (PDSB)
- Sangamo Therapeutics (SGMO)
- Vir Biotechnology (VIR)

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 Form 10-K/A (“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 2023 Annual Meeting of Shareholders, we held a non-binding shareholder say-on-pay vote. Our shareholders approved our 2023 executive compensation proposal, with 94.3% 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. On June 8, 2023 the Board adopted the Precigen, Inc. Financial Statement Compensation Recoupment Policy which policy is intended to comply with the requirements of Section 10D of the Exchange Act and Section 5608 of the Nasdaq Listing Rules. The policy provides for the recoupment of certain executive compensation in the event of an accounting restatement resulting from material noncompliance with financing reporting requirements.

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 Form 10-K/A.

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, 2023, 2022 and 2021.

Name and Principal Position	Year	Salary (\$)	Bonus(1) (\$)	Stock Awards(2) (\$)	Option Awards(3) (\$)	Incentive Plan Compensation(4) (\$)	All Other Compensation(5) (\$)	Total (\$)
Helen Sabzevari Chief Executive Officer	2023	1,000,000	—	815,625	1,885,056	—	18,380	3,719,061
	2022	1,000,000	—	750,000	1,459,127	271,875	16,620	3,497,622
	2021	1,000,000	750,002	749,998	—	—	16,170	2,516,170
Harry Thomasian Jr. Chief Financial Officer	2023	475,000	—	103,311	520,061	—	33,538	1,131,910
	2022	454,584	—	17,840	344,540	34,437	35,019	886,420
	2021	91,667	17,842	—	618,750	—	4,415	732,673
Don Lehr Chief Legal Officer	2023	575,000	—	125,062	321,317	—	43,316	1,064,695
	2022	575,000	—	80,498	258,405	41,687	35,712	991,302
	2021	575,000	80,502	201,246	—	—	35,262	892,010
Jeffrey Perez Senior Vice President, IP Affairs	2023	500,000	—	108,749	222,670	—	40,666	872,085
	2022	500,000	—	70,000	258,405	36,250	33,992	898,647
	2021	500,000	70,000	174,994	—	—	33,542	778,536
Rutul Shah(6) Chief Operating Officer	2023	410,000	—	89,174	495,775	—	43,025	1,037,974
	2022	327,500	—	55,000	344,540	29,725	36,318	793,083

- (1) Represents discretionary cash bonuses for 2021 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, 2023, which is included in our 2023 Annual Report. This column does not include for 2023 the grant date fair value of RSUs granted as part of the short-term incentive award for performance in 2023 because the awards were granted in 2024. However, it does include for 2023, 2022 and 2021 the grant date fair value of RSUs granted as part of the short-term incentive award for performance in 2022, 2021 and 2020, 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, 2023, which is included in our 2023 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 2023."
- (6) Mr. Shah commenced his employment with us as Chief Operating Officer on October 1, 2022. Accordingly, no information is displayed for 2021.

ALL OTHER COMPENSATION TABLE FOR 2023

The table below reflects the types and dollar amounts of perquisites, additional compensation, and other personal benefits provided to the named executive officers during 2023. 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	9,230	9,150	18,380
Harry Thomasian Jr.	24,388	9,150	33,538
Donald P. Lehr	34,166	9,150	43,316
Jeffrey Perez	31,516	9,150	40,666
Rutul R. Shah	33,875	9,150	43,025

GRANTS OF PLAN-BASED AWARDS FOR 2023

The following table presents information regarding grants of plan-based awards to the named executive officers during the fiscal year ended December 31, 2023.

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards(1)			All Other Stock Awards: Number of Shares of Stock or Units (#)	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards (\$/Share)	Grant Date Fair Value of Stock and Option Awards (\$)(2)
		Threshold (\$)	Target (\$)	Maximum (\$)				
Helen Sabzevari	3/24/2023				—	369,596	0.96	271,875
	3/24/2023				849,521(3)	—	—	815,625
	4/28/2023				—	1,732,300	1.21	1,613,181
		—	1,500,000	—				
Harry Thomasian Jr.	3/24/2023				—	46,815	0.96	34,437
	3/24/2023				107,604(3)	—	—	103,311
	4/28/2023				—	521,000	1.21	485,624
		—	190,000	—				
Donald P. Lehr	3/24/2023				—	56,671	0.96	41,687
	3/24/2023				130,259(3)	—	—	125,062
	4/28/2023				—	300,000	1.21	279,630
		—	230,000	—				
Jeffrey Perez	3/24/2023				—	49,279	0.96	36,250
	3/24/2023				113,268(3)	—	—	108,749
	4/28/2023				—	200,000	1.21	186,420
		—	200,000	—				
Rutul R. Shah	3/24/2023				—	40,409	0.96	29,725
	3/24/2023				92,880(3)	—	—	89,174
	4/28/2023				—	500,000	1.21	466,050
		—	164,000	—				

(1) Represents the target payout opportunity under the Company's 2023 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 2022.

OUTSTANDING EQUITY AWARDS AT 2023 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, 2023.

Name	Grant Date	Option Awards				Stock Awards	
		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 (#)	Units of Stock Not Vested (\$)
Helen Sabzevari	7/17/2017	150,000	—	22.83	7/17/2027	—	—
	1/5/2020	1,250,100	249,900	5.95	1/5/2030	—	—
	1/5/2020	1,125,000	375,000	11.9	1/5/2030	—	—
	1/5/2020	1,125,000	375,000	17.85	1/5/2030	—	—
	2/2/2022	211,750	635,250	2.33	2/2/2032	—	—
	3/24/2023(2)	—	369,596	0.96	3/24/2033	—	—
	4/28/2023	—	1,732,300	1.21	4/28/2033	—	—
Harry Thomasian Jr.	10/18/2021	90,000	90,000	4.72	10/18/2031	—	—
	2/2/2022	50,000	150,000	2.33	2/2/2032	—	—
	3/24/2023(2)	—	46,815	0.96	3/24/2033	—	—
	4/28/2023	—	521,000	1.21	4/28/2033	—	—
Donald P. Lehr	3/20/2014	207,855	—	29.56	3/20/2024	—	—
	2/2/2017	225,000	—	20.94	2/2/2027	—	—
	2/2/2022	37,500	112,500	2.33	2/2/2032	—	—
	3/24/2023(2)	—	56,671	0.96	3/24/2033	—	—
	4/28/2023	—	300,000	1.21	4/28/2033	—	—
Jeffrey Perez	8/25/2014	202,733	—	19.52	8/25/2024	—	—
	2/2/2017	225,000	—	20.94	2/2/2027	—	—
	2/2/2022	37,500	112,500	2.33	2/2/2032	—	—
	3/24/2023(2)	—	49,279	0.96	3/24/2033	—	—

	4/28/2023	—	200,000	1.21	4/28/2033	—	—
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	40,000	—	8.60	6/18/2029	—	—
	7/16/2020	45,000	15,000	4.67	7/16/2030	—	—
	4/21/2021	50,000	50,000	8.17	4/21/2031	—	—
	2/2/2022	50,000	150,000	2.33	2/2/2023	—	—
	3/24/2023(2)	—	40,409	0.96	3/24/2033	—	—
	4/28/2023	—	500,000	1.21	4/28/2033	—	—

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- (1) For awards granted prior to 2023, each award vests in four equal annual installments beginning on the anniversary of the grant date. For awards granted in 2023, each award vests as to one-fourth of the award on the first anniversary of the date of grant, with the balance of the awards vesting in 36 successive equal monthly installments thereafter, except as noted in (2) below.
- (2) Award vests on the first anniversary of the grant date.

STOCK AWARDS VESTED FOR 2023

The following table sets forth specified information concerning stock vesting for each of the named executive officers during the fiscal year ended December 31, 2023.

Name	Stock Awards	
	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)(1)
Helen Sabzevari	17,665	27,557
	849,521	1,069,717
Harry Thomasian Jr.	107,604	135,495
Donald P. Lehr	18,939	29,545
	130,259	164,022
Jeffrey Perez	18,939	29,545
	113,268	142,627
Rutul R. Shah	92,880	116,955

(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.

In addition, in February 2024, the Company entered into an employment agreement with each of Messrs. Thomasian and Shah 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 12 months of his base pay, and (ii) the named executive officer’s expected cost of COBRA premiums for continued medical coverage for up to 12 months. For purposes of the disclosure set forth under “Potential Payments” below, amounts are reported based on the arrangements in effect as of December 31, 2023, and do not reflect the terms of the agreements entered into in February 2024.

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 in our Amended and Restated 2013 Omnibus Incentive Plan (“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 and 2023 Plan’s 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 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.

A “Change in Control” is defined in the 2023 Plan to mean generally the occurrence of any 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.

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, 2023. The amounts in this table are calculated assuming the triggering event occurred on December 31, 2023 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	—	365,609	365,609	365,609	365,609
	Severance Payment	1,500,000	1,500,000	—	—	—
	Prorated Bonus	1,500,000	1,500,000	—	—	—
	Other Compensation (PTO)	87,404	87,404	—	87,404	87,404
	Benefit Plans	14,717(4)	14,717(4)	—	630,000	1,545,000
	Total	3,102,121	3,467,730	365,609	1,083,013	1,998,013
Harry Thomasian Jr	Accelerated Equity	—	—	—	—	—
	Severance Payment	—	—	—	—	—
	Other Compensation (PTO)	41,964	41,964	—	41,964	41,964
	Benefit Plans	—	—	—	630,000	1,425,000
		Total	41,964	41,964	—	671,964
Donald P. Lehr	Accelerated Equity	—	—	60,259	60,259	60,259
	Severance Payment	862,500	862,500	—	—	—
	Other Compensation (PTO)	55,288	55,288	—	55,288	55,288
	Benefit Plans	62,676(4)	62,676(4)	—	630,000	1,545,000
		Total	980,465	980,465	60,259	745,547
Jeffrey Perez	Accelerated Equity	—	—	44,721	44,721	44,721
	Severance Payment	750,000	750,000	—	—	—
	Other Compensation (PTO)	48,077	48,077	—	48,077	48,077
	Benefit Plans	55,509(4)	55,509(4)	—	630,000	1,545,000
		Total	853,587	853,587	44,721	722,798
Rutul R. Shah	Accelerated Equity	—	—	—	—	—
	Severance Payment	—	—	—	—	—
	Other Compensation (PTO)	29,784	29,784	—	29,784	29,784
	Benefit Plans	—	—	—	630,000	1,145,000
		Total	29,784	29,784	—	659,784

- (1) In the event of a change in control, as described above, unvested stock options and RSUs would only vest immediately if provision is not made for the continuance, assumption, or substitution of the 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 \$1.34 (which was the closing market price per share of our common stock on December 29, 2023, the last trading day of fiscal 2023) 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 \$1.34.
- (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.

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 2023. 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 2023, our last completed fiscal year:

- as reported in the Summary Compensation Table, the annual total compensation of our CEO was
- \$3,719,061 (see above for details on this calculation); and
- the annual total compensation of our median employee (other than our CEO) was \$118,000.

Based on this information, for 2023, the ratio of the annual total compensation of our CEO to the median of the annual total compensation of all employees was 31 to 1.

As permitted under 402(u), we elected to use the same median employee identified in 2022 in our 2023 pay ratio calculation, as we believe that there has been no change in our employee population or employee compensation arrangements that we believe would result in a significant change to our pay ratio disclosure for 2023. As disclosed in our 2022 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 2023 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 Form 10-K/A. 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, 2023 with respect to securities that may be issued pursuant to outstanding awards granted under our Amended and Restated 2013 Omnibus Incentive Plan (the "2013 Plan"), the Incentive Plan for Non-Employee Service Providers (as amended, the "2019 Plan") and the 2023 Plan and authorized for issuance under the 2013 Plan, 2019 Plan, and 2023 Plan. No new awards may be granted under the 2013 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	23,018,874(1)	\$ 6.90	20,580,603(2)
Equity compensation plans not approved by shareholders	—	—	—
Total	23,018,874(1)	\$ 6.90	20,580,603(2)

(1) Includes 22,057,340 outstanding stock options and 961,534 outstanding RSUs.

(2) Our 2023 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, 2023, and our 2019 Plan, each provide for the issuance of SARS, restricted stock awards, other stock-based awards, incentive awards, and dividend equivalents.

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 2023, 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 2023

The following table discloses all compensation provided to the non-employee directors for the most recently completed fiscal year ended December 31, 2023:

Name(1)	Fees Earned or Paid in Cash(2) (\$)	Stock Awards(3)(5) (\$)	Option Awards(4)(5) (\$)	Total (\$)
Randal Kirk	100,000	250,000	250,000	600,000
Cesar Alvarez	62,500	125,000	125,000	312,500
Steven Frank	50,000	125,000	125,000	300,000
Vinita Gupta	56,500	125,000	125,000	306,500
Fred Hassan	56,500	125,000	125,000	306,500
Jeffrey Kindler	69,000	125,000	125,000	319,000
Dean Mitchell	56,500	125,000	125,000	306,500
James Turley	62,500	125,000	125,000	312,500

(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.

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

(2) Our directors may elect to receive any portion of their annual retainer fees in shares of our common stock instead of cash. During 2023, 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 2023:

Name	Shares of Common Stock Received (#)
Randal Kirk	85,470
Cesar Alvarez	53,418
Steven Frank	42,735
Vinita Gupta	48,290
Fred Hassan	48,290
Jeffrey Kindler	58,974
Dean Mitchell	48,290
James Turley	53,418

(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, 2023, which is included in our 2023 Annual Report.

(5) The following table provides information regarding the aggregate outstanding equity awards held by each non-employee director as of December 31, 2023:

Name	RSUs Outstanding (#)	Stock Options Outstanding (#)
Randal Kirk	213,675	536,226
Cesar Alvarez	106,837	445,041
Steven Frank	106,837	445,041
Vinita Gupta	106,837	438,805
Fred Hassan	106,837	454,025
Jeffrey Kindler	106,837	445,041
Dean Mitchell	106,837	445,041
James Turley	106,837	486,611

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 on a committee, and as adjusted from time to time). Non-employee directors have five years to satisfy the ownership requirement, which, for directors serving in June 2018 (when the current requirement was adopted), was measured from such date, and for directors appointed after such date, from the date of appointment. 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, 2023, 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.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The following table sets forth information regarding beneficial ownership of our share capital as of March 31, 2024 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 250,248,808 shares of common stock outstanding as of March 31, 2024.

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)	97,040,956	739,478	97,780,434	39.1%
Cesar L. Alvarez	569,933	531,079	1,101,012	*
Steven Frank	1,024,160	531,079	1,555,239	*
Vinita Gupta(4)	455,622	540,431	996,053	*
Fred Hassan	1,029,834	555,561	1,585,485	*
Jeffrey B. Kindler	393,363	531,079	924,442	*
Dean J. Mitchell	503,183	531,079	1,034,262	*
James Turley	472,441	588,234	1,060,678	*
Named executive officers				
Helen Sabzevari(8)	1,560,004	5,912,260	7,472,264	3.0%
Harry Thomasian Jr. (8)	161,051	377,919	538,970	*
Donald P. Lehr(8)	458,916	437,921	866,837	*
Jeffrey Perez(8)	458,903	606,178	1,065,081	*
Rutul R. Shah(8)	133,474	454,876	588,350	*
Current executive officers and directors as a group(5)	104,231,840	12,337,267	116,569,107	46.6%
Greater than 5% shareholders				
Ares Trading SA(6)	20,647,152	—	—	8.3%
Patient Capital Management, LLC(7)	15,983,700	—	—	6.4%

* 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, 2024 and restricted stock units vesting within 60 days of March 31, 2024. Shares of common stock subject to stock options that are exercisable as of, or within 60 days of, March 31, 2024 and restricted stock units vesting within 60 days of March 31, 2024 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, 31,121,391 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, 1,096,686 shares held by Parkview 2020. Also includes 1,144,481 shares held by Alana D. Czynpinski, Mr. Kirk's spouse.

- (4) Includes 3,000 shares held in the Sharma-Gupta Marital Property Trust, an affiliate of Vinita Gupta.
- (5) Consists of 13 persons as of March 31, 2024.
- (6) Information is based on the Schedule 13G/A that was filed with the SEC on February 14, 2024 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.
- (7) Information is based on the Schedule 13G/A that was filed with the SEC on February 27, 2024 by Patient Capital Management, LLC and certain other information known to us.
- (8) Does not include the following shares of common stock underlying awards of restricted stock units granted to the named executive officers on April 5, 2024 that were fully vested at the time of grant: Ms. Sabzevari, 1,071,428; Mr. Thomasian, 135,714; Mr. Lehr, 164,285; Mr. Perez, 142,857; and Mr. Shah, 117,142.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

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.

Underwritten Public Offering

In January 2023, we completed an underwritten public offering of 43.96 million shares of our common stock for net proceeds of \$72.8 million (the “Follow-On Offering”). An affiliate of Mr. Kirk, RJ Kirk Trust, purchased 11.4 million shares at the public offering price of \$1.75 for an aggregate purchase price of approximately \$20.0 million, through the underwriters. J.P. Morgan Securities LLC, where Mr. Frank currently serves as Chairman of Global Healthcare Investment Banking, acted as a representative to the several underwriters in the offering and received underwriting commissions of \$2.56 million.

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 depository 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.

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, and James Turley is independent in accordance with the above standards and applicable Nasdaq and NYSE guidelines.

In determining that Mr. Frank is independent, the Board considered that Mr. Frank is a current employee of J.P. Morgan Securities LLC (“JP Morgan”). JP Morgan acted as the representative of the underwriters related to our offering of shares of common stock in January 2023. The services provided by JP Morgan were in the ordinary course of their role as lead underwriter, for which they received customary fees and commissions. In Mr. Frank’s role with JP Morgan, Mr. Frank did not participate in the provision of such services and does not materially benefit from the engagement, and his compensation from JP Morgan 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. Frank’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 services to us in the normal course of business, including various consulting, valuation and technical accounting services, for which they receive customary fees. As Mr. Turley retired from Ernst & Young over ten 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.

Item 14. Principal Accountant Fees and Services.

The following table summarizes the aggregate fees billed by Deloitte for the fiscal year ended December 31, 2023 and, for comparison purposes, the aggregate fees billed by Deloitte for the fiscal year ended December 31, 2022. The Audit Committee approved all of the services described below.

	Fiscal Year Ended December 31,	
	2023	2022
Audit Fees	\$ 1,254,600	\$ 1,439,700
Audit-Related Fees	115,000	185,000
Tax Fees	—	155,900
All Other Fee	—	—
Total Fees	\$ 1,369,600	\$ 1,780,600

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 2023 and 2022, 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 2023 and 2022, no non-audit services were performed pursuant to the *de minimis* exception.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) Documents filed as part of this Annual Report.

- (1) Financial Statements. See Index to the Consolidated Financial Statements, which appears on page F-1 of Original 10-K. The consolidated financial statements listed in the accompanying Index to the Consolidated Financial Statements are filed therewith in response to this Item.
- (2) Financial Statements Schedules. All schedules are omitted because they are not applicable or because the required information is contained in the financial statements or notes included in this report.

(b) The exhibits listed in Part IV, Item 15(b) of the Original 10-K and the exhibits listed below are filed with, or incorporated by reference into, this report.

Exhibit Number	Description
31.3	Certification of Chief Executive Officer required by Rule 13a-14(a) of the Exchange Act
31.4	Certification of Chief Financial Officer required by Rule 13a-14(a) of the Exchange Act
101. INS	Inline XBRL Instance Document – The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.
101. SCH	Inline XBRL Taxonomy Extension Schema Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PRECIGEN, INC.

Date: April 29, 2024

By: /S/ HELEN SABZEVARI

Helen Sabzevari

Chief Executive Officer and Director (Principal Executive Officer)

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Helen Sabzevari, certify that:

- (1) I have reviewed this Amendment No. 1 to Annual Report on Form 10-K/A of Precigen, Inc.;
- (2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

Date: April 29, 2024

By: _____ /S/ HELEN SABZEVARI
Helen Sabzevari
Chief Executive Officer and Director
(Principal Executive Officer)

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Harry Thomasian Jr., certify that:

- (1) I have reviewed this Amendment No. 1 to Annual Report on Form 10-K/A of Precigen, Inc.;
- (2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

Date: April 29, 2024

By: _____
/S/ HARRY THOMASIAN JR.
Harry Thomasian Jr.
Chief Financial Officer
(Principal Financial and Accounting Officer)
