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

FORM 10-Q

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

For the quarterly period ended June 30, 2025

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	**26-0084895**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**
20374 Seneca Meadows Parkway Germantown, Maryland	**20876**
(Address of principal executive offices)	**(Zip Code)**

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

N/A
(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, no par value	PGEN	Nasdaq Global Select Market

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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of July 31, 2025, 297,972,920 shares of common stock, no par value per share, were issued and outstanding.

PRECIGEN, INC.

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Special Note Regarding Forward-Looking Statements

This Quarterly Report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, which statements involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this Quarterly Report, including statements regarding our strategy; future events, including their outcome or timing; future operations; future financial position; future revenue; projected costs; prospects; plans; objectives of management; and expected market growth, are forward-looking statements. The words "aim", "anticipate", "assume", "believe", "continue", "could", "due", "estimate", "expect", "intend", "may", "objective", "plan", "positioned", "potential", "predict", "project", "seek", "should", "target", "will", "would", and the negatives of these terms or similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These statements may relate to, among other things: (i) the timeliness of regulatory approvals; (ii) our strategy and overall approach to our business model, our efforts to realign our business, and our ability to exercise more control and ownership over the development process and commercialization path; (iii) our ability to successfully enter new markets or develop additional product candidates, including the expected timing and results of investigational studies and preclinical and clinical trials, whether with our collaborators or independently; (iv) our ability to consistently manufacture our product candidates or, our products, if approved, on a timely basis or to establish agreements with third-party manufacturers; (v) our ability to successfully enter into optimal strategic relationships directly or with our subsidiaries and operating companies that we may form in the future; (vi) actual or anticipated variations in our operating results; (vii) actual or anticipated fluctuations in competitors' or collaborators' operating results or changes in their respective growth rates; (viii) our cash position; (ix) market conditions in our industry; (x) our expectations regarding the size of the patient populations amenable to treatment with our product candidates; (xi) the volatility of our stock price; (xii) the ability, and the ability of our collaborators, to protect our intellectual property and other proprietary rights and technologies; (xiii) outcomes of pending and future litigation; (xiv) the rate and degree of market acceptance of any products developed by us, our subsidiaries, or our potential collaborators, and competition from existing technologies and products or new technologies and products that may emerge; (xv) our ability to retain and recruit key personnel; (xvi) expectations related to the use of proceeds from public offerings and other financing efforts; (xvii) estimates regarding expenses, future revenue, capital requirements, and needs for additional financing; (xviii) our substantial doubt about our ability to continue as a going concern; and (xix) our timeline to commercialization of our product candidates.

Forward-looking statements are based on our beliefs, assumptions, and expectations of our future performance, and may also concern our expectations relating to our subsidiaries and other affiliates. We caution you that the foregoing list may not contain all of the forward-looking statements made in this Quarterly Report.

We may not actually achieve the plans, intentions, or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions, and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this Quarterly Report, particularly in Part II, Item 1A, "Risk Factors," that could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, JVs, or investments that we may make.

You should read this Quarterly Report, the documents that we reference in this Quarterly Report, our Annual Report on Form 10-K for the year ended December 31, 2024, the other reports we have filed with the Securities and Exchange Commission, or SEC, and the documents that we have filed as exhibits to our filings with the SEC completely and with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

PART I. FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements

Precigen, Inc. and Subsidiaries
Condensed Consolidated Balance Sheets
(Unaudited)

(Amounts in thousands, except share data)	June 30, 2025	December 31, 2024
Assets		
Current assets		
Cash and cash equivalents	$ 13,760	$ 29,517
Short-term investments	45,993	68,393
Receivables		
Trade, less allowance for credit losses of $0 as of both June 30, 2025 and December 31, 2024	327	926
Other	244	237
Prepaid expenses	2,431	3,341
Total current assets	62,755	102,414
Property, plant and equipment, net	14,695	13,831
Intangible assets, net	3,818	4,455
Goodwill	15,232	19,139
Right-of-use assets	4,806	5,056
Other assets	590	371
Total assets	$ 101,896	$ 145,266

The accompanying notes are an integral part of these condensed consolidated financial statements.

Precigen, Inc. and Subsidiaries
Condensed Consolidated Balance Sheets
(Unaudited)

(Amounts in thousands, except share data)	June 30, 2025	December 31, 2024
Liabilities, Mezzanine Equity and Shareholders' (Deficit) Equity		
Current liabilities		
Accounts payable	$ 3,922	$ 3,531
Accrued compensation and benefits	5,201	8,417
Other accrued liabilities	9,514	4,812
Indemnification accruals	3,213	3,213
Deferred revenue	413	589
Current portion of lease liabilities	930	956
Total current liabilities	23,193	21,518
Deferred revenue, net of current portion	1,818	1,934
Lease liabilities, net of current portion	4,223	4,546
Warrant liabilities	78,558	50,537
Total liabilities	107,792	78,535
Commitments and contingencies (Note 13)		
Mezzanine equity		
Series A Preferred Stock, no par value, 81,000 shares authorized as of June 30, 2025 and December 31, 2024; 79,000 shares issued as of as June 30, 2025 and December 31, 2024 (aggregate liquidation preference of $82,160 as of June 30, 2025 and $79,000 as of December 31, 2024).	30,883	28,218
Shareholders' equity (deficit)		
Common stock, no par value, 400,000,000 shares authorized as of June 30, 2025 and December 31, 2024; 297,846,160 shares and 292,869,097 shares issued and outstanding as of June 30, 2025 and December 31, 2024, respectively.	—	—
Additional paid-in capital	2,134,711	2,129,207
Accumulated deficit	(2,171,501)	(2,090,706)
Accumulated other comprehensive income	11	12
Total shareholders' (deficit) equity	(36,779)	38,513
Total liabilities, mezzanine equity and shareholders' (deficit) equity	$ 101,896	$ 145,266

The accompanying notes are an integral part of these condensed consolidated financial statements.

Precigen, Inc. and Subsidiaries
Condensed Consolidated Statements of Operations
(Unaudited)

(Amounts in thousands, except share and per share data)	Three Months Ended June 30, 2025	Three Months Ended June 30, 2024	Six Months Ended June 30, 2025	Six Months Ended June 30, 2024
Revenues				
Product revenues	$ 41	$ 31	$ 244	$ 169
Service revenues	781	673	1,896	1,592
Other revenues	34	13	57	21
Total revenues	856	717	2,197	1,782
Operating Expenses				
Cost of products and services	1,092	1,014	2,192	2,089
Research and development	11,488	15,693	21,966	29,942
Selling, general and administrative	16,133	10,306	28,492	20,457
Impairment of goodwill	3,907	1,630	3,907	1,630
Impairment of other noncurrent assets	—	32,915	—	32,915
Total operating expenses	32,620	61,558	56,557	87,033
Operating loss	(31,764)	(60,841)	(54,360)	(85,251)
Other Income (Expense), Net				
Change in fair value of warrant liabilities	4,460	—	(28,021)	—
Interest expense	—	(2)	(1)	(4)
Interest income	696	319	1,614	927
Other (expense) income, net	(31)	43	(24)	80
Total other (expense) income, net	5,125	360	(26,432)	1,003
Loss before income taxes	(26,639)	(60,481)	(80,792)	(84,248)
Income tax (expense) benefit	(3)	1,689	(3)	1,718
Net loss	$ (26,642)	$ (58,792)	$ (80,795)	$ (82,530)
Net loss per share				
Net loss per share, basic and diluted	$ (0.09)	$ (0.23)	$ (0.27)	$ (0.33)
Weighted average shares outstanding, basic and diluted	296,434,726	252,366,533	295,164,303	250,803,790

The accompanying notes are an integral part of these condensed consolidated financial statements.

Precigen, Inc. and Subsidiaries
Condensed Consolidated Statements of Comprehensive Loss
(Unaudited)

(Amounts in thousands)	Three Months Ended June 30, 2025	Three Months Ended June 30, 2024	Six Months Ended June 30, 2025	Six Months Ended June 30, 2024
Net loss	$ (26,642)	$ (58,792)	$ (80,795)	$ (82,530)
Other comprehensive loss:				
Unrealized (loss) gain on investments	(1)	16	(1)	15
Loss on foreign currency translation adjustments	—	(128)	—	(977)
Comprehensive loss	$ (26,643)	$ (58,904)	$ (80,796)	$ (83,492)

The accompanying notes are an integral part of these condensed consolidated financial statements.

Precigen, Inc. and Subsidiaries
Condensed Consolidated Statements of Mezzanine Equity and Shareholders' Equity (Deficit)
(Unaudited)

	Mezzanine Equity		Shareholders' Equity (Deficit)					
	Preferred Stock		Common Stock					
(Amounts in thousands, except share data)	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Shareholders' Equity (Deficit)
Balances at March 31, 2025	79,000	$ 29,518	295,135,060	$ —	$ 2,130,787	$ 12	$ (2,144,859)	$ (14,060)
Stock-based compensation expense	—	—	—	—	1,638	—	—	1,638
Shares issued upon vesting of restricted stock units, performance stock units and for exercises of stock options	—	—	55,000	—	73	—	—	73
Shares issued for accrued compensation	—	—	3,566,563	—	4,880	—	—	4,880
Repurchase of shares to satisfy tax withholding	—	—	(910,463)	—	(1,302)	—	—	(1,302)
Net loss	—	—	—	—	—	—	(26,642)	(26,642)
PIK dividends on preferred stock	—	1,365	—	—	(1,365)	—	—	(1,365)
Other comprehensive loss	—	—	—	—	—	(1)	—	(1)
Balances at June 30, 2025	79,000	$ 30,883	297,846,160	$ —	$ 2,134,711	$ 11	$ (2,171,501)	$ (36,779)

	Mezzanine Equity		Shareholders' Equity							
	Preferred Stock		Common Stock		Treasury Stock					
(Amounts in thousands, except share data)	Shares	Amount	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Shareholders' Equity
Balances at March 31, 2024	—	$ —	250,248,808	$ —	6,149,719	$ —	$ 2,088,025	$ (2,797)	$ (1,988,209)	$ 97,019
Stock-based compensation expense	—	—	—	—	—	—	1,964	—	—	1,964
Shares issued upon vesting of restricted stock units and for exercises of stock options	—	—	236,458	—	(236,458)	—	52	—	—	52
Shares issued for accrued compensation	—	—	2,170,885	—	—	—	3,039	—	—	3,039
Net loss	—	—	—	—	—	—	—	—	(58,792)	(58,792)
Other comprehensive loss	—	—	—	—	—	—	—	(112)	—	(112)
Balances at June 30, 2024	—	$ —	252,656,151	$ —	3,742,376	$ —	$ 2,093,080	$ (2,909)	$ (2,047,001)	$ 43,170

The accompanying notes are an integral part of these condensed consolidated financial statements.

Precigen, Inc. and Subsidiaries
Condensed Consolidated Statements of Mezzanine Equity and Shareholders' Equity (Deficit)
(Unaudited)

	Mezzanine Equity		Shareholders' Equity (Deficit)					
	Preferred Stock		Common Stock					
(Amounts in thousands, except share data)	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Shareholders' Equity (Deficit)
Balances at December 31, 2024	79,000	$ 28,218	292,869,097	$ —	$ 2,129,207	$ 12	$ (2,090,706)	$ 38,513
Stock-based compensation expense	—	—	—	—	4,315	—	—	4,315
Shares issued upon vesting of restricted stock units, performance stock units and for exercises of stock options	—	—	2,382,784	—	223	—	—	223
Shares issued for accrued compensation	—	—	3,566,563	—	4,880	—	—	4,880
Shares issued as payment for services	—	—	302,582	—	527	—	—	527
Repurchase of shares to satisfy tax withholding	—	—	(1,274,866)	—	(1,776)	—	—	(1,776)
Net loss	—	—	—	—	—	—	(80,795)	(80,795)
PIK dividends on preferred stock	—	2,665	—	—	(2,665)	—	—	(2,665)
Other comprehensive loss	—	—	—	—	—	(1)	—	(1)
Balances at June 30, 2025	79,000	$ 30,883	297,846,160	$ —	$ 2,134,711	$ 11	$ (2,171,501)	$ (36,779)

	Mezzanine Equity		Shareholders' Equity							
	Preferred Stock		Common Stock		Treasury Stock					
(Amounts in thousands, except share data)	Shares	Amount	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Shareholders' Equity
Balances at December 31, 2023	—	$ —	248,919,096	$ —	7,479,431	$ —	$ 2,084,916	$ (1,947)	$ (1,964,471)	$ 118,498
Stock-based compensation expense	—	—	—	—	—	—	4,545	—	—	4,545
Shares issued upon vesting of restricted stock units and for exercises of stock options	—	—	1,197,992	—	(1,197,992)	—	52	—	—	52
Shares issued for accrued compensation	—	—	2,170,885	—	(2,170,885)	—	3,039	—	—	3,039
Shares issued as payment for services	—	—	368,178	—	(368,178)	—	528	—	—	528
Net loss	—	—	—	—	—	—	—	—	(82,530)	(82,530)
Other comprehensive loss	—	—	—	—	—	—	—	(962)	—	(962)
Balances at June 30, 2024	—	$ —	252,656,151	$ —	3,742,376	$ —	$ 2,093,080	$ (2,909)	$ (2,047,001)	$ 43,170

The accompanying notes are an integral part of these condensed consolidated financial statements.

Precigen, Inc. and Subsidiaries
Condensed Consolidated Statements of Cash Flows
(Unaudited)

(Amounts in thousands)	Six Months Ended June 30, 2025	2024
Cash flows from operating activities		
Net loss	$ (80,795)	$ (82,530)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,259	3,191
Loss (Gain) on disposals of assets, net	14	(3)
Impairment of goodwill	3,907	1,630
Impairment of other noncurrent assets	—	32,915
Change in fair value of warrant liabilities	28,021	—
Amortization of discounts on investments, net	(1,174)	(570)
Stock-based compensation expense	4,315	4,545
Shares issued as payment for services	527	528
Deferred income taxes	—	(1,718)
Changes in operating assets and liabilities:		
Receivables:		
Trade	599	391
Other	(4)	490
Prepaid expenses	910	1,158
Other assets	(215)	55
Accounts payable	684	3,178
Accrued compensation and benefits	1,662	1,468
Other accrued liabilities	5,378	(235)
Deferred revenue	(291)	(131)
Lease liabilities	(99)	303
Settlement and indemnification accruals	—	(1,862)
Net cash used in operating activities	(35,302)	(37,197)

The accompanying notes are an integral part of these condensed consolidated financial statements.

Precigen, Inc. and Subsidiaries
Condensed Consolidated Statements of Cash Flows
(Unaudited)

(Amounts in thousands)	Six Months Ended June 30, 2025	2024
Cash flows from investing activities		
Purchases of investments	$ (38,875)	$ (51,664)
Sales and maturities of investments	62,448	97,335
Purchases of property, plant and equipment	(1,588)	(6,674)
Proceeds from sale of assets	—	3
Net cash provided by investing activities	21,985	39,000
Cash flows from financing activities		
Payment of issuance cost related to 2024 public offering of shares	(355)	—
Payments to taxing authorities in connection with shares directly withheld from employees	(1,776)	—
Proceeds from stock option exercises	223	52
Payment of issuance costs related to Series A Preferred Stock	(537)	—
Net cash (used in) provided by financing activities	(2,445)	52
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	5	(95)
Net (decrease) increase in cash, cash equivalents, and restricted cash	(15,757)	1,760
Cash, cash equivalents, and restricted cash		
Beginning of period	29,517	7,848
End of period	$ 13,760	$ 9,608
Supplemental disclosure of cash flow information		
Cash paid during the period for interest	$ —	$ 5
Cash paid during the period for income taxes	3	4
Significant noncash activities		
Accrued compensation paid in equity awards	$ 3,578	$ 3,039
Purchases of property and equipment included in accounts payable and other accrued liabilities	$ 254	$ 1,171
Proceeds from sale of assets included in accounts receivable	—	57

The accompanying notes are an integral part of these condensed consolidated financial statements.

Precigen, Inc. and Subsidiaries
Notes to the Condensed Consolidated Financial Statements
(Unaudited)
(Amounts in thousands, except share and per share data)

1. Organization

Precigen, Inc. ("Precigen"), a Virginia corporation, is a dedicated discovery and clinical-stage biopharmaceutical company advancing the next generation of gene and cell therapies with the overall goal of improving outcomes for patients with significant unmet medical needs. Precigen is leveraging its proprietary technology platforms to develop product candidates designed to target urgent and intractable diseases in its core therapeutic areas of immuno-oncology, autoimmune disorders, and infectious diseases. Precigen's primary operations are located in the state of Maryland. Precigen's leading product candidate is PRGN-2012, an AdenoVerse® gene therapy. Zopapogene imadenovec is the nonproprietary name for the investigational therapeutic known as PRGN-2012. Zopapogene imadenovec has not been approved by any health authority in any country for any indication. The United States Food and Drug Administration ("FDA") granted priority review to a Biologics License Application ("BLA") for PRGN-2012 with a Prescription Drug User Fee Act ("PDUFA") target action date set for August 27, 2025. This therapy is intended for the treatment of adults with recurrent respiratory papillomatosis ("RRP").

Precigen also has one wholly owned operating subsidiary, Exemplar Genetics, LLC ("Exemplar"). Exemplar is committed to enabling the study of life-threatening human diseases through the development of MiniSwine Yucatan miniature pig research models and services. Exemplar's primary operations are located in the State of Iowa.

Precigen's other historical operating subsidiary, Precigen ActoBio, Inc. ("ActoBio") ceased operations during 2024. ActoBio utilized a proprietary class of microbe-based biopharmaceuticals that enable expression and local delivery of disease-modifying therapeutics and was located in Ghent, Belgium.

As part of a continuing effort to strategically prioritize the application of resources to particular development efforts, in 2024 the Company initiated a shutdown of ActoBio's operations. This included the commencement of terminating leases and employees, and the disposition of certain of its assets and obligations with a focus on the preservation of ActoBio's intellectual property, which was completed during the third quarter of 2024.

In addition to the actions taken at ActoBio, in August 2024 the Company also began undertaking a strategic prioritization of its clinical portfolio and streamlining of its resources, including a reduction of over 20% of its workforce, to focus on potential commercialization of PRGN-2012. These strategic changes were designed to reduce required resources for non-priority programs and enable the Company to focus on pre-commercialization efforts for PRGN-2012, including supporting the submission of a rolling BLA under an accelerated approval pathway which was filed in the fourth quarter of 2024, conducting a confirmatory clinical trial, and manufacturing commercial product. Additionally, the Company has continued commercial readiness efforts for a potential launch in the second half of 2025. As a result of the actions taken related to the reduction in its workforce, the Company incurred a charge related to employee severance and termination benefits of $1,639 during 2024.

Precigen and its consolidated subsidiaries are hereinafter referred to as the "Company." As discussed in Note 14, the Company now operates as one segment.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying condensed consolidated financial statements are unaudited and have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). Certain information and footnote disclosures normally included in the Company's annual financial statements have been condensed or omitted. These interim condensed consolidated financial statements, in the opinion of management, reflect all normal recurring adjustments necessary for fair statement of the Company's financial position as of June 30, 2025 and results of operations and cash flows for the interim periods ended June 30, 2025 and 2024. The year-end condensed consolidated balance sheet data was derived from the Company's audited financial statements but does not include all disclosures required by U.S. GAAP. These interim financial results are not necessarily indicative of the results to be expected for the year ending December 31, 2025, or for any other future annual or interim period. The accompanying interim unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2024.

The accompanying condensed consolidated financial statements reflect the operations of Precigen and its majority-owned subsidiaries. All intercompany accounts and transactions have been eliminated.

Liquidity and Going Concern

During the six months ended June 30, 2025, the Company incurred a net loss of $80,795 and used $35,302 of cash in its operations, and as of June 30, 2025, had an accumulated deficit of $2,171,501. The Company has incurred operating losses since its inception and management expects operating losses and negative cash flows from operations, exclusive of cash sources outside of the Company's direct control, including potential revenue from PRGN-2012 for the treatment of adults with RRP, to continue in the foreseeable future. In addition, as of June 30, 2025, the Company had $59,753 in cash, cash equivalents and short-term investments, and had no committed source of additional funding. Considering only the forecasted cash flows under its direct control, the Company's current cash and investments position is not sufficient to fund the Company's planned operations for one year after the date the interim financial statements are issued and accordingly, these conditions and events raise substantial doubt about the Company's ability to continue as a going concern.

As the Company continues to incur losses, its transition to profitability will depend on the successful development, approval and commercialization of product candidates and on the achievement of sufficient revenues to support the Company's cost structure.

The analysis used to determine the Company's ability to continue as a going concern does not include cash sources outside of the Company's direct control that management expects to be available within the next twelve months, such as the potential revenue from PRGN-2012 for the treatment of adults with RRP. This potential revenue has been excluded as the BLA, which the FDA accepted and granted priority review in February 2025 (with a PDUFA target action date set for August 27, 2025), has not yet been approved.

In addition, the Company may decide, or be required, to raise additional capital. This additional capital could be raised through a combination of non-dilutive financings (including debt financings, collaborations, strategic alliances, monetization of core and non-core assets, marketing, distribution or licensing arrangements, and/or dilutive financings including equity and/or debt financings which may include an equity component). Also, any collaborations, strategic alliances, monetization of assets or marketing, distribution or licensing arrangement may require the Company to give up some or all of its rights to a product or technology, which in some cases may be at less than the full potential value of such rights. If the approval of the PRGN-2012 BLA is delayed or not granted, and/or the Company is unable to obtain additional capital, the Company will assess its capital resources and may be required to delay, reduce the scope of, or eliminate some or all of its operations, which may include research and development and clinical trials. As a result, the Company has concluded that management's plans do not alleviate substantial doubt about the Company's ability to continue as a going concern.

These interim condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles applicable to a going concern and do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of this uncertainty.

Risks and Uncertainties

The Company is subject to a number of risks similar to those of other companies conducting high-risk, early-stage research and development of therapeutic product candidates. Principal among these risks are dependence on key individuals and intellectual property, competition from other products and companies, and the technical risks associated with the successful research, development and clinical and commercial manufacturing of its therapeutic product candidates.

Research and Development

The Company considers that regulatory requirements inherent in the research and development of new products preclude it from capitalizing such costs. Research and development expenses include salaries and related costs of research and development personnel, including stock-based compensation expense, costs to acquire or reacquire technology rights, contract research organizations and consultants, facilities, materials and supplies associated with research and development projects as well as various laboratory studies. Costs incurred in conjunction with collaboration and licensing arrangements are included in research and development. Indirect research and development costs include depreciation, amortization, and other indirect overhead expenses. The Company has research and development arrangements with third parties that include upfront and milestone payments. As of June 30, 2025 and December 31, 2024, the Company had research and development commitments

with third parties that had not yet been incurred totaling $4,556 and $5,885, respectively. The commitments are generally cancellable by the Company by providing written notice at least sixty days before the desire termination date.

Cash and Cash Equivalents

All highly liquid investments with an original maturity of three months or less at the date of purchase are considered to be cash equivalents. Cash balances at a limited number of banks may periodically exceed insurable amounts. The Company believes that it mitigates its risk by investing in or through major financial institutions. Recoverability of investments is dependent upon the performance of the issuer.

Investments

As of June 30, 2025 and December 31, 2024, short-term investments include corporate bonds, United States government debt and agency securities and certificates of deposit. The Company determines the appropriate classification as short-term or long-term at the time of purchase based on original maturities and management's reasonable expectation of sales and redemption. The Company reevaluates such classification at each balance sheet date.

Fair Value of Financial Instruments

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset and liability. As a basis for considering such assumptions, the Company uses a three-tier fair value hierarchy that prioritizes the inputs used in its fair value measurements. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

Level 1:	Quoted prices in active markets for identical assets and liabilities;
Level 2:	Other than quoted prices included in Level 1 inputs that are observable for the asset or liability, either directly or indirectly; and
Level 3:	Unobservable inputs for the asset or liability used to measure fair value to the extent that observable inputs are not available.

Pre-Launch Inventory

Prior to an initial regulatory authorization for our drug product candidates, we expense costs relating to raw materials and inventory production as research and development expenses in our consolidated statements of operations in the period incurred. We capitalize the costs of production as inventory when we believe regulatory authorization and subsequent commercialization are considered probable and we expect to realize future economic benefit from the sales of the drug product candidate. We have not capitalized any inventory to date related to drug products.

Net Loss per Share

Basic net loss per share is calculated by dividing net loss attributable to common shareholders by the weighted average shares outstanding during the period, without consideration of common stock equivalents. Diluted net loss per share is calculated by adjusting weighted average shares outstanding for the dilutive effect of common stock equivalents outstanding for the period, using the treasury-stock. For purposes of the diluted net loss per share calculation, shares to be issued pursuant to stock options, restricted stock units ("RSUs") and performance stock units ("PSUs") are considered to be common stock equivalents but are excluded from the calculation of diluted net loss per share because their effect would be anti-dilutive as described in the next paragraph, and therefore, basic and diluted net loss per share were the same for all periods presented.

In accordance with ASC 260, the control number for determining whether including potential common shares in the diluted earnings per share, or EPS, computation would be antidilutive should be income from continuing operations. As a result, if there is a loss from continuing operations, diluted EPS would be computed in the same manner as basic EPS is computed, even if the entity has net income after adjusting for a discontinued operation.

The following potentially dilutive securities as of June 30, 2025 and 2024 have been excluded from the above computations of diluted weighted average shares outstanding for the three and six months then ended as they would have been anti-dilutive:

	June 30,	
	2025	2024
Options	29,078,506	27,403,769
Restricted stock units	2,472,686	786,709
Performance stock units	2,594,000	—
Total	34,145,192	28,190,478

The table above does not include 54,937,413 shares of common stock into which the Series A Preferred Stock is currently convertible and 52,666,669 shares of common stock for which the Warrants are currently exercisable, in each case as of June 30, 2025, and excludes additional shares of common stock that could become issuable as a result of (i) the associated PIK dividends for these instruments (as defined below) and (ii) potential increases to the conversion rate of the Series A Preferred Stock pursuant to the terms thereof.

Warrants

The Company accounts for warrants as either equity-classified or liability-classified instruments based on an assessment of the warrant's specific terms and applicable authoritative guidance in ASC 480, Distinguishing Liabilities from Equity ("ASC 480") and ASC 815, Derivatives and Hedging ("ASC 815"). The assessment considers whether the warrants are freestanding financial instruments pursuant to ASC 480, meet the definition of a liability pursuant to ASC 480, and whether the warrants meet all of the requirements for equity classification under ASC 815, including whether the warrants are indexed to the Company's own common stock and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of warrant issuance and as of each subsequent quarterly period end date while the warrants are outstanding. For equity-classified warrants, the fair value is not remeasured. For warrants that are liability-classified, changes in fair value are included in Change in fair value of warrant liabilities in the Consolidated Statements of Operations.

Mezzanine Equity

Where ordinary or preferred shares are determined to be conditionally redeemable upon the occurrence of certain events that are not solely within the control of the Company, and upon such event, the shares would become redeemable at the option of the holder, or when the Company currently does not have a sufficient number of authorized and unissued shares available to share settle the instrument, they are classified as "mezzanine equity" (temporary equity). The purpose of this classification is to convey that such a security may not be permanently part of equity and could result in a demand for cash, securities or other assets of the entity in the future.

The Company evaluates whether the contingent redemption provisions are probable of becoming redeemable to determine whether the carrying value of the redeemable convertible preferred units is required to be remeasured to their respective redemption values. All instruments that are classified as mezzanine equity are evaluated for embedded derivative features by evaluating each feature against the nature of the host instrument (e.g., more equity-like or debt-like). Features identified as freestanding instruments or bifurcated embedded derivatives that are material are recognized separately as a derivative asset or liability in the consolidated financial statements.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

Recently Issued Accounting Pronouncements Not Yet Adopted

In November 2024, the FASB issued ASU 2024-03, in order to improve the disclosures about a public business entity's expenses and address requests from investors for more detailed information about the types of expenses in commonly presented expense captions. The amendments in ASU 2024-03 require disclosure, in the notes to the financial statements, of specified information about certain costs and expenses in interim and year-end reporting periods. The amendments in this ASU apply to all public business entities and are effective for annual reporting periods beginning after December 15, 2026, and interim reporting periods beginning after December 15, 2027.

In December 2023, the FASB issued ASU 2023-09 Income Taxes (Topic 740): Improvements to Income Tax Disclosures to enhance the transparency and decision usefulness of income tax disclosures. The guidance will require improvements to income tax disclosures primarily related to the rate reconciliation and income taxes paid information. The amendments in this ASU apply to all public business entities and are effective for annual reporting periods beginning after December 15, 2024. The Company is currently assessing the impact of the new guidance on its financial statement disclosures.

There are no other new accounting standards which have not yet been adopted that are expected to have a significant impact on our financial statements and related disclosures.

3. Collaboration and Licensing Revenue

The Company's collaborations and licensing agreements may provide for multiple promises to be satisfied by the Company and typically include a license to the Company's technology platforms, participation in collaboration committees, and performance of certain research and development services. Based on the nature of the promises in the Company's collaboration and licensing agreements, the Company typically combines most of its promises into a single performance obligation because the promises are highly interrelated and not individually distinct. Options to acquire additional services are considered to determine if they constitute material rights. At contract inception, the transaction price is typically the upfront payment received and is allocated to the performance obligations. The Company has determined the transaction price should be recognized as revenue based on its measure of progress under the agreement primarily based on inputs necessary to fulfill the performance obligation.

The Company determines whether collaborations and licensing agreements are individually significant for disclosure based on a number of factors, including total revenue recorded by the Company pursuant to collaboration and licensing agreements, collaborators or licensees with equity method investments, or other qualitative factors. Collaboration and licensing revenues generated from consolidated subsidiaries are eliminated in consolidation.

There was no collaboration and licensing revenue recognized during both the three and six months ended June 30, 2025 and 2024.

Deferred Revenue

Deferred revenue primarily consists of upfront and milestone consideration received for the Company's historical collaboration and licensing agreements. Revenue is recognized as services are performed. The arrangements classified as long-term are not active while the respective counterparties evaluate the status of the project and its desired future development activities since the Company cannot reasonably estimate the amount of services, if any, to be performed over the next year.

Deferred revenue consisted of the following:

	June 30, 2025	December 31, 2024
Collaboration and licensing agreements- Long-term liability	$ 1,818	$ 1,818
Prepaid product and service revenues - Short-term liability	413	705
Total	$ 2,231	$ 2,523

4. Investments

The Company's investments are classified as available-for-sale. The following table summarizes the amortized cost, gross unrealized gains and losses, and fair value of available-for-sale investments as of June 30, 2025:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Aggregate Fair Value
U.S. government debt securities	$ 43,452	$ 21	$ (10)	$ 43,463
Certificates of deposit	2,470	—	—	2,470
Corporate bonds	60	—	—	60
Total	$ 45,982	$ 21	$ (10)	$ 45,993

The estimated fair value of available-for-sale investments classified by their contractual maturities as of June 30, 2025 was:

Due within one year	$ 45,993
Total	$ 45,993

The following table summarizes the amortized cost, gross unrealized gains and losses, and fair value of available-for-sale investments as of December 31, 2024:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Aggregate Fair Value
U.S. government debt securities	$ 67,464	$ 15	$ (5)	$ 67,474
Certificates of deposit	848	3	—	851
Corporate bonds	69	—	(1)	68
Total	$ 68,381	$ 18	$ (6)	$ 68,393

The estimated fair value of available-for-sale investments classified by their contractual maturities as of December 31, 2024 was:

Due within one year	$ 68,393
Total	$ 68,393

In addition, at June 30, 2025 and December 31, 2024, the Company held U.S. government debt securities valued at $9,209 and $24,169, respectively, which were included in cash and cash equivalents in the condensed consolidated balance sheet as these investments had an original maturity of less than three months when purchased.

Changes in market interest rates and bond yields cause certain investments to fall below their cost basis, resulting in unrealized losses on investments.

5. Fair Value Measurements

The carrying amount of cash and cash equivalents, receivables, accounts payable, accrued compensation and benefits, and other accrued liabilities approximate fair value due to the short maturity of these instruments.

The following table presents the placement in the fair value hierarchy of financial assets that are measured at fair value on a recurring basis as of June 30, 2025:

	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	June 30, 2025
Assets				
U.S. government debt securities	$ —	$ 43,463	$ —	$ 43,463
Certificates of deposit	—	2,470	—	2,470
Corporate bonds	—	60	—	60
Total	$ —	$ 45,993	$ —	$ 45,993
Liabilities				
Warrant liabilities	$ —	$ —	$ 78,558	$ 78,558
Total liabilities	$ —	$ —	$ 78,558	$ 78,558

The following table presents the placement in the fair value hierarchy of financial assets that are measured at fair value on a recurring basis as of December 31, 2024:

	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	December 31, 2024
Assets				
U.S. government debt securities	$ —	$ 67,474	$ —	$ 67,474
Certificates of deposit	—	851	—	851
Corporate bonds	—	68	—	68
Total	$ —	$ 68,393	$ —	$ 68,393
Liabilities				
Warrant liabilities	$ —	$ —	$ 50,537	$ 50,537
Total liabilities	$ —	$ —	$ 50,537	$ 50,537

The method used to estimate the fair value of the Level 2 investments in the tables above is based on professional pricing sources for identical or comparable instruments, rather than direct observations of quoted prices in active markets.

Warrant liabilities

The Warrant liabilities (as defined below) are comprised of outstanding warrants to purchase 52,666,669 shares of common stock, no par value per share at an exercise price of $0.75 per share issued in a private placement in December 2024.

The Warrants were accounted for as liabilities as the Warrants provide the holder the right to acquire, via a paid in kind ("PIK") dividend on the Series A Preferred Stock for the first two years following the issue date of the Series A Preferred Stock (see Note 10), a number of additional warrants to purchase shares of common stock equal to 50% of the amount of such PIK dividends divided by the $0.75 exercise price ("PIK Warrants"), which fails the requirement of the indexation guidance under ASC 815-40. The Warrants and PIK Warrants (together the "Warrant liabilities") are measured at fair value at inception. The fair value of the outstanding Warrants is re-measured at the end of each reporting period, unless and until they are reclassified to equity. After the last PIK dividend payment date for the Series A Preferred Stock in January 2027, the Warrants will have a predominantly fixed settlement amount as there will be no further anticipated PIK dividends that would adjust the number of Warrants. At this point, assuming all other criteria are met for indexation, the Warrants will cease to fail the indexation guidance and will be classified within equity.

The Company uses various option pricing models, such as the Black-Scholes option pricing model and the Monte Carlo simulation model, to estimate the fair value of the Warrant liabilities. In using these models, we make certain assumptions about risk-free interest rates, dividend yields, volatility, expected term of the Warrants and other assumptions. Risk-free interest rates are derived from the yield on U.S. Treasury debt securities. Dividend yields are based on our historical dividend payments, which have been zero to date. Volatility is estimated from the historical volatility of our common stock as traded on the Nasdaq Stock Market Exchange. The expected term of the Warrants is based on the time to expiration of the Warrants from the date of measurement.

The fair value of the Warrants is estimated using a Black-Scholes option-pricing model. The significant assumptions used in preparing the option pricing model for valuing the Warrant liabilities as of June 30, 2025, include (i) volatility of 87.1% (discounted for lack of marketability), (ii) risk free interest rate of 4.2%, (iii) strike price ($0.75), (iv) fair value of common stock ($1.42), and (v) expected life of 9 years, 6 months. As of December 31, 2024, the significant assumptions included (i) volatility of 86.2% (discounted for lack of marketability), (ii) risk free interest rate of 4.5%, (iii) strike price ($0.75), (iv) fair value of common stock ($0.93), and (v) expected life of 10 years.

The fair value of the PIK Warrants is estimated using a Black-Scholes option pricing model within a Monte Carlo simulation model framework. The significant assumptions used in preparing the simulation model for valuing the PIK Warrant as of June 30, 2025, include (i) volatility of 87.1% (discounted for lack of marketability), (ii) risk free interest rate range of 3.8% to 4.2%, (iii) strike price ($0.75), (iii) term to PIK Warrant payment date of one to 2 years, and (vii) expected Company's stock price range to the corresponding PIK Warrant payment date of $0.14 to $5.49. As of December 31, 2024 , the significant assumptions included (i) volatility of 86.2% (discounted for lack of marketability), (ii) risk free interest rate range of 4.1% to

4.2%, (iii) strike price ($0.75), (iii) term to PIK Warrant payment date of one to two years, and (vii) expected Company's stock price range to the corresponding PIK Warrant payment date of $0.06 to $3.05.

During the three and six months ended June 30, 2025, the Company recorded a non-cash gain of $4,460 and a non-cash expense of $28,021, respectively, related to the change in the fair value of the Warrants liabilities during the respective period, within other income (expense), net in the accompanying Condensed Consolidated Statements of Operations.

Preferred Stock - PIK Dividends

On December 30, 2024, the Company issued in a private placement 79,000 shares of its 8.00% Series A Convertible Perpetual Preferred Stock (the "Series A Preferred Stock") and warrants to purchase an aggregate of 52,666,669 shares of its common stock (the "Warrants") at an exercise price of $0.75, for gross proceeds of $79,000. In accordance with the Articles of Amendment to the Company's amended and restated articles of incorporation, on each PIK dividend payment date, the stated value of the Series A Preferred Stock shall automatically be increased by the accumulated PIK dividend amount. The PIK dividends were determined to be discretionary and as such, they are measured at fair value as of the date they accumulate. Due to the absence of retained earnings, the adjustment to record the value of the PIK dividends is recorded as a reduction to additional paid-in capital. See Note 10 for further discussion on PIK dividends.

The fair value of the PIK dividend was estimated using significant unobservable inputs (Level 3) by conducting a discounted cash flow analysis. As of June 30, 2025, the significant assumptions include, (i) stock price of $1.42, (ii) term of 30 years, (iii) volatility of 87.1%, (iv) risk free rate of 4.7%, and (v) risky discount rate of 25%. No PIK dividend was required to be accrued as of December 31, 2024.

Accrued PIK dividends of $2,665 are included in Series A Preferred Stock on the accompanying Condensed Balance Sheet as of June 30, 2025.

6. Property, Plant and Equipment, Net

Property, plant and equipment consist of the following:

	June 30, 2025	December 31, 2024
Land and land improvements	$ 164	$ 164
Buildings and building improvements	2,629	2,629
Furniture and fixtures	381	364
Equipment	16,749	16,774
Leasehold improvements	4,497	4,478
Breeding stock	72	88
Computer hardware and software	2,275	3,186
Construction and other assets in progress	10,443	9,019
	37,210	36,702
Less: Accumulated depreciation and amortization	(22,515)	(22,871)
Property, plant and equipment, net	$ 14,695	$ 13,831

Depreciation expense was $312 and $388 for the three months ended June 30, 2025 and 2024, respectively, and $622 and $768 for the six months ended June 30, 2025 and 2024, respectively.

7. Goodwill and Intangible Assets, Net

The changes in the carrying amount of goodwill for the six months ended June 30, 2025 were as follows:

Balance at December 31, 2024	$	19,139
Impairment		(3,907)
Balances at June 30, 2025	$	15,232

The Company had $36,189 and $32,282 of cumulative impairment losses as of June 30, 2025 and December 31, 2024.

The Company completes its annual goodwill impairment test during the fourth quarter of each year, or more frequently if triggering events indicate a possible impairment in one or more of its reporting units. During the second quarter of 2025, the Company lowered its financial expectations related to the Exemplar reporting unit for the remainder of 2025 and into 2026 due to projected delays in the timing of planned product and services rendered to existing and new customers. These factors constituted an interim triggering event as of the end of the Company's second quarter of 2025, and the Company performed an impairment analysis with regard to its goodwill.

The revised projections were used as a key input into Exemplar's reporting unit's annual goodwill impairment test performed as of June 30, 2025. The impairment charge of $3,907 represented the estimated excess of carrying value over fair value of this reporting unit. The Company estimated the fair value of its reporting unit utilizing a combination of a discounted present value cash flow model as well as a market earnings multiple approach.

Intangible assets consist of the following as of June 30, 2025:

	Gross Carrying Amount	Accumulated Amortization	Net
Patents, developed technologies and know-how	$ 15,912	$ (12,094)	$ 3,818

Intangible assets consist of the following as of December 31, 2024:

	Gross Carrying Amount	Accumulated Amortization	Net
Patents, developed technologies and know-how	$ 15,912	$ (11,457)	$ 4,455

Amortization expense were $318 and $1,208 for the three months ended June 30, 2025 and 2024, respectively, and $637 and $2,423 for the six months ended June 30, 2025 and 2024, respectively.

8. Debt

Line of Credit

Exemplar has a $5,000 revolving line of credit with American State Bank that matures on November 1, 2025. As of June 30, 2025 and December 31, 2024, the line of credit bore interest at a stated rate of 8.00% per annum. As of June 30, 2025 and December 31, 2024, there was no outstanding balance.

9. Income Taxes

The Company computes its year-to-date tax expense or benefit by applying the annual effective tax rate to year-to-date pretax income or loss and adjusts for discrete items recorded in the period. The annual effective tax rate is the ratio of estimated annual income tax expense related to estimated pretax loss from continuing operations, excluding significant unusual or infrequently occurring items. As a result of the pretax losses anticipated for the full year which are not benefited, this rate has been calculated and applied to the year-to-date interim period's ordinary income or loss on a jurisdiction by jurisdiction basis to determine the income tax expense/benefit allocated to the year-to-date period. The annual effective tax rate is revised, if necessary, at the end of each interim period based on the Company's most current best estimate. There was $3 of income tax expense for the three and six months ended June 30, 2025, and $1,689 and $1,718 of income tax benefit for the three and six

months ended June 30, 2024, respectively. The effective tax rate differs from the U.S. statutory tax rate, primarily as a result of the change in valuation allowance required.

The Company's net deferred tax assets are offset by a valuation allowance due to the Company's history of net losses combined with an inability to confirm recovery of the tax benefits of the Company's tax attributes and other net deferred tax assets. In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment.

10. Mezzanine Equity and Shareholders' Equity (Deficit)

Under the Company's amended and restated articles of incorporation the Company is authorized to issue 400,000,000 shares of common stock and 25,000,000 shares of preferred stock.

Amendment to the Articles of Incorporation - Series A Preferred Stock

On December 27, 2024, Precigen filed articles of amendment (the "Articles of Amendment") to its amended and restated articles of incorporation with the State Corporation Commission of the Commonwealth of Virginia ("SCC") , including a form of certificate for the Series A Preferred Stock, designating 81,000 shares of its authorized and unissued preferred stock as 8.00% Series A Convertible Perpetual Preferred Stock (the "Series A Preferred Stock") and establishing the preferences, limitations and relative rights of the Series A Preferred Stock. The Articles of Amendment became effective following the issuance of a certificate of amendment by the SCC to Precigen on December 30, 2024.

Amendment to the Articles of Incorporation - Increase of authorized shares

On July 25, 2025, Precigen filed articles of amendment (the "Authorized Shares Amendment") to its amended and restated articles of incorporation with the SCC, to increase Precigen's authorized shares of common stock to 700,000,000, which was previously approved by Precigen's shareholders on June 26, 2025. The Authorized Shares Amendment became effective following the issuance of a certificate of amendment by the SCC to Precigen on July 28, 2025.

Issuances of Preferred Stock and Warrants

On December 30, 2024, the Company issued 79,000 shares of the Series A Preferred Stock with an initial liquidation preference and stated value of $1,000 per share, together with the Warrants (see Note 5), for gross proceeds of $79,000 and net proceeds of $78,463, after deducting offering expenses, which had not been paid as of June 30, 2025. The aggregate exercise price of the Warrants is approximately $39,500, exercisable for an aggregate of 52,666,669 shares of common stock. The terms of the Series A Preferred Stock are summarized below.

Series A Preferred Stock Rights:

Dividend. Dividends on the Series A Preferred Stock will be paid annually in cash at a rate of 8.00% when, as and if declared by the board of directors of Precigen, except that for the first two years following the issue date of the Series A Preferred Stock, such dividends will be paid in kind in the form of an increase to the stated value and the liquidation preference of the Series A Preferred Stock by the amount of such dividends, together with Warrants to acquire a number of additional shares of common stock equal to 50% of the amount of such dividends divided by the $0.75 exercise price of the Warrants.

Redemption. The Series A Preferred Stock is redeemable, in whole or in part, for cash at Precigen's option at any time. The redemption price will be equal to the stated value of the Series A Preferred Stock to be redeemed, plus accumulated and unpaid dividends, if any, to, but excluding, the redemption date. If a fundamental change occurs (as defined in Precigen's Amended and Restated Articles of Incorporation), then holders of the Series A Preferred Stock may require Precigen to repurchase their shares of Series A Preferred Stock for cash. The repurchase price will be equal to the stated value of the shares of Series A Preferred Stock to be repurchased, plus accumulated and unpaid dividends, if any, to, but excluding, the repurchase date.

Conversion. The Series A Preferred Stock is convertible into common stock at the option of the holders of the Series A Preferred Stock at any time. The Series A Preferred Stock will also be convertible into common stock at Precigen's option at any time on or after the third anniversary of the issue date of the Series A Preferred Stock, but only if the closing sale price per share of common stock equals or exceeds $4.00 for a specified period of time and certain other conditions are satisfied. The Series A Preferred Stock was initially convertible into shares of common stock at a conversion rate of 888.8888 shares of

common stock per $1,000 of stated value, for an initial conversion price of approximately $1.125 per share. However, if the arithmetic average of the closing sale prices of the common stock over the five trading day period ending on, and including, the last trading day of the fiscal quarter immediately preceding any conversion date exceeds the conversion price otherwise in effect on such conversion date, then the conversion rate for purposes of such conversion will be a number of shares of common stock per $1,000 of stated value equal to $1,000 divided by such arithmetic average. Based upon the arithmetic average of the closing sale prices of the common stock over the five trading day period ending on, and including June 30, 2025, the conversion price was $1.438 per share, which corresponds to a conversion rate of approximately 695.4103 shares of common stock per $1,000 of stated value. The conversion rate is also subject to customary anti-dilution adjustments.

The Series A Preferred Stock has no maturity date, ranks senior to the outstanding shares of common stock with respect to the payment of dividends and distributions in liquidation and has a liquidation preference equal to its stated value plus any accrued and unpaid dividends (whether or not declared). Subject to certain limited exceptions, the Series A Preferred Stock and the Warrants are not transferable for six months from the issue date.

Mezzanine Classification

ASC 480-10-S99-3A(2) of the SEC's Accounting Series Release No. 268 ("ASR 268") requires preferred securities that are redeemable for cash or other assets to be classified outside of permanent equity if they are redeemable (i) at a fixed or determinable price on a fixed or determinable date, (ii) at the option of the holder, or (iii) upon the occurrence of an event that is not solely within the control of the issuer. Preferred securities that are mandatorily redeemable are required to be classified by the issuer as liabilities whereas under ASR 268, a company should classify a preferred security whose redemption is contingent on an event not entirely in control of the issuer as mezzanine equity. The Series A Preferred Stock is redeemable at the option of the holder upon a "fundamental change" (as defined in the agreements) that is not solely within control of the Company, and accordingly, the Company determined that mezzanine treatment is appropriate for the Series A Preferred Stock.

The Series A Preferred Stock was initially measured at the amount of total proceeds less any offering costs and proceeds allocated to the Warrants, and is presented as such in our Condensed Consolidated Balance Sheet as of December 31, 2024. As disclosed in Note 5, for the six months ended June 30, 2025, the Company recorded $2,665 for PIK dividends, increasing the value of the Series A Preferred Stock on the Condensed Consolidated Balance Sheet at June 30, 2025 and reducing Additional Paid-In Capital (as the Company does not have retained earnings) in the Condensed Consolidated Statements of Mezzanine Equity and Shareholders' Equity (Deficit) for the six months ended June 30, 2025. Further, the Company evaluated all embedded features against an equity-like host and concluded none of the embedded features identified within the Series A Preferred Stock require bifurcation as they are either deemed clearly and closely related or not net settleable as a result of a lack of an active market.

Issuances of Precigen Common Stock

In August 2024, the Company closed a public offering of 39,878,939 shares of its common stock, resulting in net proceeds to the Company of $30,882, after deducting underwriting discounts, fees, and other offering expenses. This included the sale of 4,584,821 shares of the Company’s common stock pursuant to the underwriter’s exercise of its option to purchase additional shares. Of the 39,878,939 shares, 23,588,234 shares were purchased by related parties and their affiliates, including the Company's Chairman of the Board of Directors and his affiliates, and one of the Company's executive officers.

Components of Accumulated Other Comprehensive Income (Loss)

The components of accumulated other comprehensive income consist solely of unrealized gain (loss) on investments.

11. Share-Based Payments

The Company measures the fair value of stock options, RSUs and PSUs issued to employees and nonemployees as of the grant date for recognition of stock-based compensation expense. Stock-based compensation expense for employees and nonemployees for which stock options and RSUs are issued, is recognized over the requisite service period, which is typically the vesting period. For PSUs, the Company recognizes stock-based compensation over the performance period, if it is probable that the performance condition will be achieved. Adjustments to PSU related stock-based compensation expense are made, as needed, each reporting period based on changes in the Company's estimate of the number of units that are probable of vesting. Stock-based compensation costs included in the condensed consolidated statements of operations are presented below:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2025	2024	2025	2024
Cost of products and services	$ 6	$ (5)	$ 18	$ 12
Research and development	463	920	1,021	1,454
Selling, general and administrative	1,169	1,049	3,276	3,079
Total	$ 1,638	$ 1,964	$ 4,315	$ 4,545

Precigen Equity Incentive Plans

In August 2013, Precigen adopted the 2013 Omnibus Incentive Plan (the "2013 Plan"), for employees and nonemployees which provided for grants of share-based awards, including stock options, RSUs, shares of common stock and other awards, to employees, officers, consultants, advisors, and nonemployee directors. Upon the effectiveness of the Company's 2023 Omnibus Incentive Plan, as amended (the "2023 Plan") in June 2023, no new awards may be granted under the 2013 Plan and any awards granted under the 2013 Plan prior to the effectiveness of the 2023 Plan will remain outstanding under such plan and will continue to vest and/or become exercisable in accordance with their original terms and conditions. As of June 30, 2025, there were 15,477,243 stock options and no RSUs outstanding under the 2013 Plan.

In April 2023, Precigen adopted the 2023 Plan, which became effective upon shareholder approval in June 2023. The 2023 Plan permits the grant of share-based awards, including stock options, restricted stock awards, RSUs, PSUs and other awards, to officers, employees and nonemployees. The 2023 Plan authorizes for issuance pursuant to awards under the 2023 Plan an aggregate of 29,918,137 shares, which included shares remaining available for issuance under the 2013 Plan as of the adoption of the 2023 Plan plus an amendment to increase the number of shares of common stock which may be subject to awards thereunder by 2,000,000 shares, which was approved by Precigen's shareholders at Precigen's annual meeting on July 5, 2024, and subsequent amendment to increase the number of shares by 11,500,000, which was approved by Precigen's board of directors in May 2025 and subsequently approved by its shareholders at Precigen's annual meeting of shareholders held on June 26, 2025. As of June 30, 2025, there were 9,163,562 stock options, 2,594,000 PSUs and 1,699,375 RSUs outstanding under the 2023 Plan and 10,307,743 shares were available for future grants.

In April 2019, Precigen adopted the 2019 Incentive Plan for Non-Employee Service Providers, as amended (the "2019 Plan"), which became effective upon shareholder approval in June 2019. The 2019 Plan permits the grant of share-based awards, including stock options, restricted stock awards, and RSUs, to non-employee service providers, including board members. As of June 30, 2025, there were 13,100,000 shares authorized for issuance under the 2019 Plan, which included shares remaining available for issuance under the 2019 Plan as of the adoption of the 2019 Plan plus an amendment to increase the number of shares of common stock which may be subject to awards thereunder by 1,100,000, which was approved by Precigen's board of directors in May 2025 and subsequently approved by its shareholders at Precigen's annual meeting of shareholders held on June 26, 2025. As of June 30, 2025, the 2019 Plan had 4,437,701 stock options and 773,311 RSUs outstanding and 1,847,272 shares were available for future grants.

Stock option activity was as follows:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)
Balances at December 31, 2024	25,924,734	$ 5.07	7.05
Granted	4,280,403	1.43	
Exercised	(194,487)	(1.15)	
Forfeited	(303,605)	(1.68)	
Expired	(628,539)	(19.03)	
Balances at June 30, 2025	29,078,506	4.29	7.17
Exercisable at June 30, 2025	18,271,112	5.99	6.17

PSUs and RSUs

In 2024, the Company's Compensation and Human Capital Management Committee of the Board of Directors (the "Compensation Committee") approved the grant of 3,178,000 PSUs under the 2023 Plan to certain key employees of the Company. Of the PSUs granted, 2,978,000, are subject to vesting in two equal 50% installments based upon the achievement of two specified operational milestones relating to (i) the Company’s good faith submission to the FDA of a complete BLA for the Company’s PRGN-2012 investigational product and (ii) the approval of the BLA by the FDA. The remaining 200,000 PSUs granted in 2024 are subject to vesting in two equal 50% installments based on (i) the achievement of the approval of the BLA by the FDA and (ii) continued employment with the Company through the six-month anniversary of the approval of the BLA by the FDA.

The performance milestones may be achieved (and the related PSUs earned) at any time through December 31, 2026 (the “Performance Period”), and the PSUs will vest and be settled in shares of the Company’s common stock at such time as the Compensation Committee certifies that an applicable performance milestone has been achieved, subject to the employee's continued employment through the applicable achievement date (subject to certain exceptions). Any PSUs for which a performance milestone has not been achieved by the end of the Performance Period will be cancelled and forfeited.

In January 2025, the Compensation Committee certified the first performance milestone related to the submission to the FDA of the BLA had been achieved, and as such, approximately 1.5 million PSU shares vested during the six months ended June 30, 2025. In the second quarter of 2025, the Compensation Committee approved the grant of 950,000 PSUs under the 2023 Plan to non-executive employees of the Company. The PSUs granted are scheduled to vest one year from grant date, but only if the approval of the BLA by the FDA occurs prior to such date.

RSU and PSU activity was as follows:

	Number of RSUs and PSUs	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term (Years)
Balances at December 31, 2024	4,004,057	$ 1.16	0.55
Granted	6,863,489	1.41	
Vested	(5,754,860)	(1.31)	
Forfeited	(46,000)	(1.18)	
Balances at June 30, 2025	5,066,686	1.34	0.86

With respect to the awards granted in 2024 with two specified milestones, as of the award grant date, the underlying performance milestone relating to the Company's submission of a BLA to the FDA was considered probable of achievement and stock-based compensation expense was recognized during the year ended December 31, 2024 related to this milestone. As of the award grant date, the underlying performance milestone related to the approval of the BLA by the FDA was determined to be not probable of achievement, as such approval is outside of the Company's control. Therefore, no stock-based

compensation expense was recognized for the three and six months ended June 30, 2025 and during 2024 related to this milestone.

Precigen uses treasury shares (to the extent available) and authorized and unissued shares to satisfy share award exercises.

12. Operating Leases

The Company leases certain facilities and equipment under operating leases. Leases with a lease term of twelve months or less are considered short-term leases and are not recorded on the balance sheet, and expense for these leases is recognized over the term of the lease. All other leases have remaining terms of less than one year to five years, some of which may include options to extend the lease and some of which may include options to terminate the lease within one year. The Company uses judgment to determine whether it is reasonably possible to extend the lease beyond the initial term or terminate before the initial term ends and the length of the possible extension or early termination. The leases are renewable at the option of the Company and do not contain residual value guarantees, covenants, or other restrictions.

The components of lease costs were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2025	2024	2025	2024
Operating lease costs	$ 415	$ 609	$ 831	$ 1,218
Short-term lease costs	8	22	18	35
Variable lease costs	90	92	180	184
Lease costs	$ 513	$ 723	$ 1,029	$ 1,437

As of June 30, 2025, maturities of lease liabilities, excluding short-term and variable leases were as follows:

2025	$ 708
2026	1,572
2027	1,358
2028	1,263
2029	1,295
2030	553
Thereafter	—
Total	$ 6,749
Present value adjustment	(1,596)
Total	$ 5,153
Current portion of operating lease liabilities	$ 930
Long-term portion of operating lease liabilities	4,223
Total	$ 5,153

Other information related to operating leases was as follows:

	June 30, 2025	December 31, 2024
Weighted average remaining lease term (years)	4.40	4.83
Weighted average discount rate	11.54 %	11.57 %

	Six Months Ended June 30,	
	2025	2024
Supplemental disclosure of cash flow information		
Cash paid for operating lease liabilities	$ 834	$ 1,144
Operating lease right-of-use assets obtained in exchange for new lease liabilities (includes new leases or modifications of existing leases)	297	572

13. Commitments and Contingencies

In December 2020, a derivative shareholder action, captioned *Edward D. Wright, derivatively on behalf of Precigen, Inc. F/K/A Intrexon Corp. v. Alvarez et al*, was filed in the Circuit Court for Fairfax County in Virginia on behalf of Precigen, Inc. The complaint named as defendants certain of the Company' directors and certain of the Company's current and former officers. The complaint's claims related to disclosures made by the Company about MBP program from May 10, 2017 to March 1, 2019. The plaintiff seeks damages, forfeiture of benefits received by defendants, and an award of reasonable attorneys' fees and costs. The case was stayed by an order entered on June 14, 2021. On September 24, 2021, an individual shareholder filed a lawsuit in the Circuit Court for Henrico County styled *Kent v. Precigen*, Inc., Case CL21-6349. The *Kent* action, also related to disclosures regarding MBP program, demands inspection of certain books and records of the Company pursuant to Virginia statutory and common law. On April 1, 2022, the court denied the demurrer and referred the matter to a hearing on the merits. The Company intends to defend the lawsuits vigorously; however, there can be no assurances regarding the ultimate outcome of these lawsuits.

In August 2022, the Company completed the sale of 100% of the issued and outstanding membership interests in its wholly-owned subsidiary, Trans Ova, to Spring Bidco LLC (the “Buyer”), a Delaware limited liability company for $170,000 and up to $10,000 in cash earn-out payments contingent upon the performance of Trans Ova in each of 2022 and 2023, consisting of $5,000 for each year (the “Transaction”). In February 2023, the Buyer notified the Company that Trans Ova did not meet the financial measures required in 2022 in order to require the first $5,000 earn-out payment. In April 2024, the Buyer notified the Company that Trans Ova did not meet the financial measures required in 2023 in order to require the second $5,000 earn-out payment. After an arbitration process regarding this conclusion, it was determined that no payment was due to the Company related to the second $5,000 earn-out payment.

In connection with the sale of Trans Ova, the Company is required to indemnify the Buyer for certain expenses incurred post close (related to covenants and certain additional specified liabilities including certain patent infringement lawsuits), if incurred, in amounts not to exceed $5,750. Such indemnification was recorded as a reduction of the gain on divestiture in the third quarter of 2022. As of June 30, 2025 and December 31, 2024, $3,213 was included in indemnification accruals on the condensed consolidated balance sheets, respectively, related to this indemnification liability. During 2024, the Company paid $1,862 for expenses incurred by the Buyer for the period from July 2023 to December 2023. In addition, during 2023, the Company paid $675 for indemnification claims against this liability for the period from the date of sale to June 2023.

In the course of its business, the Company is involved in litigation or legal matters, including governmental investigations. Such matters may result in adverse judgments, unfavorable settlements, or concessions by the Company, or adverse regulatory action, any of which could harm the Company’s business or operations. Moreover, such matters are subject to many uncertainties and outcomes are not predictable with assurance. The Company accrues liabilities for such matters when it is probable that future expenditures will be made and such expenditures can be reasonably estimated. As of June 30, 2025, the Company does not believe that any such matters, individually or in the aggregate, will have a material adverse effect on the Company's business, financial condition, results of operations, or cash flows.

14. Segments

While the Company has historically generated revenues from multiple sources, including collaboration agreements and products and services associated with animal research models, management is organized around a singular focus which is developing and commercializing product candidates in its core therapeutic areas of immuno-oncology, autoimmune disorders, and infectious diseases. In February 2025, the FDA granted priority review to Company's BLA for PRGN-2012, with a PDUFA target action date set for August 27, 2025. During the first quarter of 2025, the Company realigned its former two operating segments, Biopharmaceuticals and Exemplar, into one operating segment. This decision was made to streamline operations and enhance focus on core business activities in anticipation of a potential second half of 2025 product launch. The Company implemented this change to better reflect how the Company is managed and its strategic initiative to concentrate resources on its core business line reflects a change in the manner in which the chief operating decision maker ("CODM"), reviews information to assess the Company's performance and make decisions about resource allocation, in accordance with ASC 280, *Segment Reporting*. The Company's CODM is its President and Chief Executive Officer ("CEO"). The CODM manages and allocates resources at a consolidated level.

Also, beginning in the first quarter of 2025, the CEO began using net loss in accordance with generally accepted accounting principles to assess performance and decide how to allocate resources. The CEO uses net loss to evaluate the allocation of resources across functions and research and development projects in line with our overarching long-term company-wide strategic goals as well as to monitor budget versus actual results. The CEO does not use total assets to evaluate segment performance or allocate resources, and accordingly, these amounts are not required to be disclosed. All prior period segment data has been retrospectively adjusted to reflect the way the Company's CODM internally receives information and manages and monitors our operating segment performance starting in fiscal year 2025.

The accounting policies of the Company's single operating segment are the same as those described in the summary of significant accounting policies as described in Note 2. As of June 30, 2025, substantially all of the Company's long-lived assets were held in the United States and there were no revenues derived in foreign countries for any periods presented. Expenditures for the addition of long-lived assets are reported on the consolidated statements of cash flows as purchases of property and equipment.

Total segment net loss, which equals consolidated net loss per the condensed consolidated statements of operations was as follows:

	Three Months Ended June 30,		Six months ended June 30,	
	2025	2024	2025	2024
Revenues from external customers	$ 856	$ 717	$ 2,197	$ 1,782
Less:				
Salaries, benefits and other payroll expenses, including severance costs	(9,721)	(12,395)	(18,907)	(23,185)
Rent and Utilities	(873)	(1,101)	(1,805)	(2,113)
Unrealized (appreciation) depreciation in fair value of Warrants liabilities	4,460	—	(28,021)	—
Impairment of Goodwill	(3,907)	(1,630)	(3,907)	(1,630)
Impairment of Assets	—	(32,915)	—	(32,915)
Other segment expenses, net	(17,457)	(11,468)	(30,352)	(24,469)
Net loss	$ (26,642)	$ (58,792)	$ (80,795)	$ (82,530)

Other segment expenses, net in the table above includes external R&D costs including laboratory supplies, third-party commercialization and manufacturing costs, cost of sales, consultant costs, legal and professional fees, insurance, and certain other overhead expenses.

For the three months ended June 30, 2025 and 2024, 76.9% and 74.8%, respectively, of total consolidated revenue was attributable to four customers. For the six months ended June 30, 2025 and 2024, 50.5% and 65.5%, respectively, of total consolidated revenue was attributed to three customers in 2025 and four customers in 2024.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following "Management's Discussion and Analysis of Financial Condition and Results of Operations" should be read in conjunction with the unaudited financial information and the notes thereto included in this Quarterly Report on Form 10-Q, or Quarterly Report, and our Annual Report on Form 10-K for the year ended December 31, 2024, or Annual Report.

The following discussion contains forward-looking statements that reflect our plans, estimates, expectations, and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements and you are cautioned not to place undue reliance on forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this Quarterly Report, particularly in "Special Note Regarding Forward-Looking Statements" and "Risk Factors." The forward-looking statements included in this Quarterly Report are made only as of the date hereof.

Overview

We are a dedicated discovery and clinical-stage biopharmaceutical company advancing the next generation of gene and cell therapies with the overall goal of improving outcomes for patients with significant unmet medical needs. We are leveraging our proprietary technology platforms to develop product candidates designed to target urgent and intractable diseases in our core therapeutic areas of immuno-oncology, autoimmune disorders, and infectious diseases. We have developed an extensive pipeline of therapies across multiple indications.

We believe that our array of technology platforms uniquely positions us among other biotechnology companies to advance precision medicine. Precision medicine is the practice of therapeutic product development that takes into account specific genetic variations within populations impacted by a disease to design targeted therapies to improve outcomes for a disease or patient population. Our proprietary and complementary technology platforms provide a strong foundation to realize the core promise of precision medicine by supporting our efforts to construct powerful gene programs to drive efficacy, deliver these programs through viral, non-viral, and microbe-based approaches to drive lower costs, and control gene expression to drive safety. Our therapeutic platforms, including UltraCAR-T, AdenoVerse immunotherapy, and ActoBiotics, are designed to allow us to precisely control the level and physiological location of gene expression and modify biological molecules to control the function and output of living cells to treat underlying disease conditions. We have developed a proprietary electroporation device, UltraPorator, designed to further streamline and ensure the rapid and cost-effective manufacturing of UltraCAR-T therapies. UltraPorator has received Food and Drug Administration ("FDA") clearance for manufacturing UltraCAR-T cells in clinical trials, and we have dosed patients with UltraCAR-T cells manufactured with UltraPorator in our clinical trials.

Our clinical pipeline includes PRGN-2012 and PRGN-2009, which are based on our AdenoVerse immunotherapy platform; and PRGN-3005, PRGN-3006 and PRGN-3007, which are built on our UltraCAR-T platform. We have completed enrollment in the Phase 1b clinical trial of PRGN-3006. As part of the strategic prioritization of our pipeline, we have paused enrollment in the PRGN-3005 and PRGN-3007 clinical trials.

In August 2024, we announced the strategic prioritization of our pipeline to focus on development of our lead program, PRGN-2012. We have minimized UltraCAR-T spending and plan to focus on strategic partnerships to further advance UltraCAR-T programs. As part of this restructuring, we paused enrollment in PRGN-3005 and PRGN-3007 UltraCAR-T clinical trials. In addition, we plan to continue PRGN-2009 Phase 2 clinical trials under a cooperative research and development agreement ("CRADA") with the National Cancer Institute ("NCI") in recurrent/metastatic cervical cancer and in newly diagnosed HPV-associated oropharyngeal cancer. We have reduced our focus on preclinical programs, while continuing select projects that we believe could provide further near-term validation of our technology platforms.

These strategic changes were designed to enable us to focus on the pre-commercialization efforts for PRGN-2012, including supporting regulatory approval, conducting the confirmatory clinical trial, and manufacturing of commercial product. Additionally, we have continued commercial readiness efforts for a potential launch. We have completed submission of a Biologics License Application ("BLA") for PRGN-2012 for the treatment of adults with Recurrent Respiratory Papillomatosis ("RRP") and the FDA has granted priority review with a Prescription Drug User Fee Act ("PDUFA") target action date set for August 27, 2025.

Precigen

We are developing therapies built on our "off-the-shelf" AdenoVerse immunotherapy platform and our UltraCAR-T therapeutics platform. Our AdenoVerse immunotherapy platform utilizes a library of proprietary adenovectors for the efficient gene delivery of therapeutic effectors, immunomodulators, and vaccine antigens. We have established proprietary manufacturing cell lines and production methodologies from our AdenoVerse immunotherapy platform, which we believe are scalable for commercial supply. We believe that our proprietary gorilla adenovectors, part of the AdenoVerse technology, have superior performance characteristics as compared to current competition, including standard human adenovirus serotype 5, rare human adenovirus types and other non-human primate adenovirus types.

PRGN-2012 is an investigational AdenoVerse immunotherapy with optimized antigen design that uses our gorilla adenovector technology, part of our proprietary AdenoVerse platform, to elicit immune responses directed against cells infected with HPV6 and HPV11. We have completed the Phase 1/2 pivotal clinical trial of PRGN-2012 in adults with RRP. The Phase 1/2 pivotal study met the primary safety and efficacy endpoints. The confirmatory clinical trial of PRGN-2012 is enrolling patients. PRGN-2012 has been granted Breakthrough Therapy Designation and Orphan Drug designation for the treatment of RRP by the FDA. PRGN-2012 has received Orphan Drug Designation for the Treatment of RRP from the European Commission as well. We have completed the submission of, and received priority review for Precigen's BLA for PRGN-2012, which is intended for treating adults with RRP. The PDUFA target action date is set for August 27, 2025.

PRGN-2009 is an investigational AdenoVerse immuno-therapy designed to activate the immune system to recognize and target human papillomavirus-positive, or HPV+, solid tumors. PRGN-2009 leverages our UltraVector and AdenoVerse platforms to optimize HPV type 16 ("HPV 16") and HPV type 18 ("HPV 18"), antigen designed for delivery via a proprietary gorilla adenovector with a large genetic payload capacity and the ability for repeat administrations. Guided by our bioinformatics analysis and in silico protein engineering, PRGN-2009 encodes for a novel, multi-epitope antigen design to target HPV16 and HPV18 infected cells and potentially differentiates from the competition. We have completed a Phase 1 clinical trial of PRGN-2009 as a monotherapy or in combination with bintrafusp alfa, or M7824, an investigational bifunctional fusion protein, for patients with HPV-associated cancers in collaboration with the NCI, pursuant to a CRADA. PRGN-2009 is being evaluated in two Phase 2 clinical trials in combination with anti-PD1 monoclonal antibody, pembrolizumab, for patients with HPV-associated cancers in collaboration with NCI pursuant to a CRADA. In addition, a Phase 2 randomized-controlled clinical trial of PRGN-2009 in combination with pembrolizumab to treat patients with recurrent or metastatic cervical cancer is ongoing pursuant to a CRADA. As part of the strategic prioritization of our pipeline announced in August 2024, we plan to enroll patients in the PRGN-2009 clinical trials only at NCI under a CRADA.

Through our UltraCAR-T therapeutics platform, we are able to precision-engineer UltraCAR-T cells to produce a homogeneous cell product that simultaneously expresses antigen-specific chimeric antigen receptor, or CAR, kill switch, and our proprietary membrane-bound interleukin-15, or mbIL15, genes in any genetically modified UltraCAR-T cell. Our decentralized and rapid proprietary manufacturing process allows us to manufacture UltraCAR-T cells overnight at a medical center's current good manufacturing practices facility, or cGMP, and reinfuse the patient the following day after gene transfer. This process improves upon current approaches to CAR-T manufacturing, which require extensive *ex vivo* expansion following viral vector transduction to achieve clinically relevant cell numbers that we believe can result in the exhaustion of CAR-T cells prior to their administration, limiting their potential for persistence in patients. We have developed a proprietary electroporation device, UltraPorator, designed to further streamline and ensure the rapid and cost-effective manufacturing of UltraCAR-T therapies. The UltraPorator system includes proprietary hardware and software solutions and potentially represents a major advancements over current electroporation devices by significantly reducing the processing time and contamination risk. UltraPorator is intended to be a viable scale-up and commercialization solution for decentralized UltraCAR-T manufacturing.

PRGN-3006 is an investigational autologous CAR-T therapy that utilizes our UltraCAR-T platform to express a CAR to target CD33 (Siglec-3), mbIL15 and a kill switch gene. PRGN-3006 is in a Phase 1/1b clinical trial for the treatment of relapsed or refractory, or r/r, acute myeloid leukemia, or AML, and high-risk myelodysplastic syndromes, or MDS. PRGN-3006 has been granted Fast Track designation in patients with r/r AML by the FDA. Previously PRGN-3006 was granted Orphan Drug Designation in patients with AML by the FDA. We have completed the Phase 1 dose escalation trial. We have completed enrollment of the Phase 1b trial for PRGN-3006 in AML. We plan to focus on strategic partnership opportunities to advance PRGN-3006 UltraCAR-T program in AML.

PRGN-3005 is an investigational autologous CAR-T therapy that utilizes our UltraCAR-T platform to simultaneously express a CAR targeting the unshed portion of the Mucin 16 antigen, mbIL15, and kill switch genes. PRGN-3005 is in a Phase 1/1b clinical trial for the treatment of advanced, recurrent platinum-resistant ovarian, fallopian tube, or primary peritoneal cancer. We have completed the Phase 1 dose escalation portion of the PRGN-3005 Phase 1/1b study. As part of the strategic

prioritization of our pipeline announced in August 2024, we have paused enrollment in the Phase 1b clinical trial of PRGN-3005.

PRGN-3007 is an investigational autologous CAR-T therapy that utilizes the next generation UltraCAR-T platform to express a CAR which targets ROR1, mbIL15, a kill switch, and a novel mechanism for the intrinsic blockade of the programmed death 1, or PD-1, gene expression. PRGN-3007 is in a Phase 1/1b clinical trial for patients with advanced receptor tyrosine kinase-like orphan receptor 1-positive, or ROR1^{+}, hematological (Arm 1) and solid tumors (Arm 2). The target patient population for Arm 1 includes relapsed or refractory CLL, relapsed or refractory MCL, relapsed or refractory B-ALL, and relapsed or refractory DLBCL. The target patient population for Arm 2 includes locally advanced unresectable or metastatic histologically confirmed TNBC. The trial is designed to enroll in two parts: an initial 3+3 dose escalation in each arm followed by a dose expansion at the maximum tolerated dose. As part of the strategic prioritization of our pipeline announced in August 2024, we have paused enrollment in the Phase 1 clinical trial of PRGN-3007.

Precigen ActoBio, Inc.

ActoBio has developed a proprietary class of microbe-based biopharmaceuticals that enable expression and local delivery of disease-modifying therapeutics. We refer to these microbe-based biopharmaceuticals as ActoBiotics. ActoBio’s lead asset is AG019, a disease modifying antigen-specific, investigational immunotherapy for the prevention, delay, or reversal of type 1 diabetes mellitus, or T1D. We have completed a Phase 1b/2a clinical trial of AG019 for the treatment of early-onset T1D. As part of our strategic prioritization, we have completed the shutdown of our ActoBio subsidiary operations, including the elimination of all ActoBio personnel. In conjunction with this shutdown, ActoBio's portfolio of intellectual property is available for prospective transactions.

Precigen Exemplar

Exemplar is committed to enabling the study of life-threatening human diseases through the development of MiniSwine Yucatan miniature pig research models and services. Historically, researchers have lacked animal models that faithfully represent human diseases. As a result, a sizeable barrier has blocked progress in the discovery of human disease mechanisms; novel diagnostics, procedures, devices, prevention strategies and therapeutics; and the ability to predict in humans the efficacy of those next-generation procedures, devices, and therapeutics. Exemplar's MiniSwine models are genetically engineered to exhibit a wide variety of human disease states, which provides a more accurate platform to test the efficacy of new medications and devices.

Financial overview

We have incurred significant losses since our inception. We anticipate that we may continue to incur significant losses in the foreseeable future, and we may never achieve or maintain profitability. Our historical collaboration and licensing revenues were generated under a business model from which we have gradually transitioned, and we do not expect to expend significant resources servicing our historical collaborations in the future. We may enter into strategic transactions for individual platforms or programs in the future from which we may generate new collaboration and licensing revenues. We continue to generate product and service revenues through our Exemplar subsidiary. Products currently in our clinical pipeline will require regulatory approval and/or commercial scale-up before they may commence significant product sales and operating profits.

As we continue our efforts to focus our business and generate additional capital, we may be willing to enter into transactions involving our operating segment or one or more of our reporting units for which we have goodwill and intangible assets. These efforts could result in us identifying impairment indicators or recording impairment charges in future periods. In addition, market changes and changes in judgements, assumptions, and estimates that we have made in assessing the fair value of goodwill could cause us to consider some portion or all of certain assets to become impaired.

See further discussion regarding our ability to continue as a going concern below under the Liquidity and capital resources section of Item 2.

Sources of revenue

Currently, our primary revenues arise from Exemplar, which generates product and service revenues through the development and sale of genetically engineered miniature swine models. We recognize revenue when control of the promised product or service is transferred to the customer.

In future periods, our revenues will primarily depend on our ability to advance and create our own programs and the extent to which we bring products enabled by our technologies to market. Other than for collaboration revenues recognized upon cancellation or modification of an existing collaboration or for revenues generated pursuant to future strategic transactions for any of our existing platforms or programs, we expect our collaboration revenues will continue to be minimal or zero in the near term, although if any new collaboration agreements or strategic transactions are entered into, revenue could be positively impacted. Our revenues will also depend upon our ability to maintain or improve the volume and pricing of Exemplar's current product and service offerings. We anticipate that our expenses will increase substantially if, and as, we continue to advance the preclinical and clinical development of our existing product candidates and our research programs. We expect some period of time, and in most cases a significant period of time, could pass before commercialization of our various product candidates or before the achievement of contractual milestones and the realization of royalties on product candidates commercialized under our collaborations. Accordingly, there can be no assurance as to the timing, magnitude, and predictability of revenues, if any, to which we might be entitled.

Cost of products and services

Cost of products and services, all which are related to our Exemplar reporting segment, includes primarily labor and related costs, drugs and supplies, feed used in production, and facility charges, including rent and depreciation. Fluctuations in the price of livestock and feed have not had a significant impact on our operating margins and no derivative financial instruments are used to mitigate the price risk.

Research and development expenses

We recognize research and development expenses as they are incurred. Our research and development expenses consist primarily of:

- salaries and benefits, including stock-based compensation expense and severance benefits, for personnel in research and development functions;
- fees paid to consultants and contract research organizations who perform research on our behalf and under our direction;
- costs related to laboratory supplies used in our research and development efforts and acquiring, developing, and manufacturing preclinical study and clinical trial materials as well as potential commercial products;
- costs related to certain in-licensed technology rights or in-process research and development;
- amortization of patents and related technologies acquired in mergers and acquisitions;
- facility-related expenses, which include direct depreciation costs and expenses for rent and maintenance of facilities and other operating costs; and
- other manufacturing costs related to the manufacture of drug products that have not yet been approved by the FDA.

Our research and development expenses primarily relate to either costs incurred to expand or otherwise improve our technologies or the costs incurred to develop our own products and services. Prior to August 2024, the Company was progressing preclinical and clinical programs that targeted urgent and intractable diseases in our core therapeutic areas of immuno-oncology, autoimmune disorders, and infectious diseases, including PRGN-3005, PRGN-3006, PRGN-3007, PRGN-2009, PRGN-2012 and AG019. As discussed above in the Overview, in August 2024, we announced a strategic prioritization of our clinical portfolio and streamlining of resources, to focus on potential commercialization of the PRGN-2012

AdenoVerse® gene therapy for the treatment of RRP. The Company's research and development activities also include the development of new and improved pig research models.

In addition to the strategic prioritization, the amount of research and development expenses may be impacted by, among other things, the number and nature of our own proprietary programs, the number and size of programs we may support on behalf of collaboration agreements, and the potential approval of the PRGN-2012 BLA by the FDA, as certain manufacturing costs will be recorded into inventory post approval.

Selling, general and administrative expenses

Selling, general and administrative, or SG&A, expenses consist primarily of salaries and related costs, including stock-based compensation expense and severance benefits, for employees in executive, operational (including commercialization), finance, information technology, legal, and corporate communications functions. Other significant SG&A expenses include rent and utilities, insurance, accounting, external commercialization costs, and legal services (including the cost of settling any claims and lawsuits), and expenses associated with obtaining and maintaining our intellectual property.

SG&A expenses may fluctuate in the future depending on the scaling of our corporate functions required to support our corporate initiatives, the strategic prioritization, the build-up of our commercialization efforts and the outcomes of legal claims and assessments against us.

Other income (expense), net

Other income and expense net, consists of changes in the fair value of warrant liabilities and interest earned on our cash and cash equivalents and short-term and long-term investments, which may fluctuate based on amounts invested and current interest rates.

Results of operations

Comparison of the three months ended June 30, 2025 and the three months ended June 30, 2024

The following table summarizes our results of operations for the three months ended June 30, 2025 and 2024 (dollars in thousands):

	Three Months Ended June 30,		Dollar Change	Percent Change
	2025	2024		
Product revenues	$ 41	$ 31	$ 10	32.3 %
Service revenues	781	673	108	16.0 %
Other revenues	34	13	21	161.5 %
Total revenues	856	717	139	19.4 %
Operating expenses				
Cost of product and services	1,092	1,014	78	7.7 %
Research and development	11,488	15,693	(4,205)	(26.8)%
Selling, general and administrative	16,133	10,306	5,827	56.5 %
Impairment of goodwill	3,907	1,630	2,277	139.7 %
Impairment of other noncurrent assets	—	32,915	(32,915)	(100.0)%
Total operating expenses	32,620	61,558	(28,938)	(47.0)%
Operating loss	(31,764)	(60,841)	29,077	(47.8)%
Total other income (expense), net	5,125	360	4,765	>200%
Loss before income taxes	(26,639)	(60,481)	33,842	(56.0)%
Income tax (expense) benefit	(3)	1,689	(1,692)	(100.2)%
Net loss	$ (26,642)	$ (58,792)	$ 32,150	(54.7)%

Product, service and other revenues

Product, service and other revenues increased $0.1 million, or 19%, compared to the three months ended June 30, 2024. This increase was primarily related to increased volume of products sold and services rendered at Exemplar.

Cost of product and services

Cost of product and services slightly increased, primarily as a result of higher revenues at Exemplar.

Research and development expenses

Research and development expenses decreased by $4.2 million, or 27%, compared to the three months ended June 30, 2024. The decrease was primarily due to a $3.8 million decrease in costs associated with ActoBio, including depreciation, amortization, personnel and other research and development costs after the Company closed ActoBio operations in late 2024. Additionally, there was a decrease of $0.5 million incurred at contract research organizations as a result of the Company's asset prioritization announced in the third quarter of 2024.

Selling, general and administrative expenses

SG&A expenses increased by $5.8 million, or 57%, compared to the three months ended June 30, 2024. This increase was primarily associated with PRGN-2012 commercial readiness. This increase was partially offset by a reduction in costs associated with ActoBio, legal fees, insurance rates and license and patent fees compared to the prior year period.

Impairment of Goodwill and other noncurrent assets

In the second quarter of 2025, we recorded $3.9 million in impairment related to our Exemplar reporting unit. Additionally, in conjunction with the suspension of ActoBio’s operations, we recorded $34.5 million of impairment charges related to goodwill and long-lived assets in the second quarter of 2024.

Total other income (expense), net

Total other income (expense) increased $4.8 million, compared to the three months ended June 30, 2024. This change was primarily driven by $4.5 million decrease in the fair value of warrant liabilities, which was influenced by a decrease in the stock price of Precigen common stock compared to the first quarter of 2025 and to a lesser extent, a decrease in the liability to account for the additional warrants that will be issued as part of the paid-in-kind dividends related to the Company's Series A Preferred Stock,which was also influenced by a decrease in the stock price of Precigen common stock compared to the first quarter of 2025. Additionally, interest income rose by $0.4 million resulting from increased investment balances.

Comparison of the six months ended June 30, 2025 and the six months ended June 30, 2024

The following table summarizes our results of operations for the six months ended June 30, 2025 and 2024 (dollars in thousands):

	Six months ended June 30,		Dollar Change	Percent Change
	2025	2024		
Product revenues	$ 244	$ 169	$ 75	44.4 %
Service revenues	1,896	1,592	304	19.1 %
Other revenues	57	21	36	171.4 %
Total revenues	2,197	1,782	415	23.3 %
Operating expenses				
Cost of product and services	2,192	2,089	103	4.9 %
Research and development	21,966	29,942	(7,976)	(26.6)%
Selling, general and administrative	28,492	20,457	8,035	39.3 %
Impairment of goodwill	3,907	1,630	2,277	139.7 %
Impairment of other noncurrent assets	—	32,915	(32,915)	(100.0)%
Total operating expenses	56,557	87,033	(30,476)	(35.0)%
Operating loss	(54,360)	(85,251)	30,891	(36.2)%
Total other income (expense), net	(26,432)	1,003	(27,435)	>(200)%
Loss before income taxes	(80,792)	(84,248)	3,456	(4.1)%
Income tax (expense) benefit	(3)	1,718	(1,721)	(100.2)%
Net loss	$ (80,795)	$ (82,530)	$ 1,735	(2.1)%

Product and service revenues

Product and service revenues increased by $0.4 million, or 22%, compared to the six months ended June 30, 2024. This increase was primarily related to increased volume of products sold and services rendered at Exemplar.

Cost of product and services

Cost of product and service increased primarily as a result of higher revenues at Exemplar.

Research and development expenses

Research and development expenses decreased by $8.0 million, or (27)%, compared to the six months ended June 30, 2024. The decrease was primarily due to a $5.6 million decrease in costs associated with ActoBio, including depreciation, amortization, personnel and other research and development costs after the Company closed ActoBio operations in late 2024. Additionally, there was a decrease of $1.5 million at contract research organizations and a $1 million reduction in personnel expenses due to the Company's asset prioritization announced in the third quarter of 2024.

Selling, general and administrative expenses

SG&A expenses increased by $8.0 million, or 39%, compared to the six months ended June 30, 2024. This increase was primarily associated with PRGN-2012 commercial readiness. This increase was partially offset by a reduction in costs associated with ActoBio, legal fees, insurance rates and license and patent fees compared to the prior year period.

Impairment of Goodwill and other noncurrent assets

In the second quarter of 2025, we recorded $3.9 million in impairment related to our Exemplar reporting unit. In conjunction with the suspension of ActoBio’s operations, we recorded $34.5 million of impairment charges related to goodwill and long-lived assets in the second quarter of 2024.

Total other income (expense), net

Total other income (expense), net changed from income of $1.0 million in the six months ended June 30, 2024 to expense of $26.4 million in the six months ended June 30, 2025. This change was primarily driven by the recording of a $28.0 million increase in the fair value of warrant liabilities, which was influenced by an increase in the stock price of Precigen common stock compared to the end of 2024 and, to a lesser extent, an increase in the liability to account for the additional warrants that will be issued as part of the paid-in-kind dividends related to the Company's Series A Preferred Stock, which was also influenced by an increase in the stock price of Precigen common stock since December 31, 2024.

Liquidity and capital resources

Sources of liquidity

We have incurred losses from continuing operations since our inception, and as of June 30, 2025, we had an accumulated deficit of $2.2 billion. From our inception through June 30, 2025, we have funded our operations principally with proceeds received from private and public equity and debt offerings, cash received from our collaborators, and through product and service sales made directly to customers. As of June 30, 2025, we had cash and cash equivalents of $13.8 million and investments of $46.0 million. Cash in excess of immediate requirements is typically invested primarily in money market funds, certificate of deposits and U.S. government debt securities in order to maintain liquidity and preserve capital.

In August 2024, we closed a public offering of 39,878,939 shares of our common stock, resulting in net proceeds to us of $30.9 million, after deducting underwriting discounts, fees, and an estimate of other offering expenses.

In December 2024, we issued 79,000 shares of 8.00% Series A Convertible Perpetual Preferred Stock with an initial liquidation preference and stated value of $1,000 per share, together with warrants to purchase 52,666,669 shares of common stock for net proceeds of approximately $78,463, after deducting offering expenses.

Cash flows

The following table sets forth the significant sources and uses of cash for the periods set forth below:

	Six Months Ended June 30,	
	2025	2024
	(In thousands)	
Net cash (used in) provided by:		
Operating activities	$ (35,302)	$ (37,197)
Investing activities	21,985	39,000
Financing activities	(2,445)	52
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	5	(95)
Net (decrease) increase in cash, cash equivalents, and restricted cash	$ (15,757)	$ 1,760

Cash flows from operating activities:

During the six months ended June 30, 2025, our net loss was $80.8 million, which includes the following significant noncash expenses and benefits totaling $36.8 million: (i) $28.0 million of unrealized appreciation in the fair value of warrant liabilities, (ii) $3.9 million impairment of goodwill, (iii) $4.3 million of stock-based compensation expense, (iv) $1.3 million of depreciation and amortization expense, and (v) $0.5 million of shares issued as payment for services, partially offset by non-cash benefits of $1.2 million due to amortization of discounts on investments. In addition, changes in operating assets and liabilities provided $8.6 million of cash for operating activities.

During the six months ended June 30, 2024, our net loss was $82.5 million, which includes the following significant noncash expenses and benefits totaling $40.4 million: (i) $34.5 million of impairment losses, (ii) $4.5 million of stock-based compensation expense, (iii) $3.2 million of depreciation and amortization expense, and (iv) $0.5 million of shares issued as payment for services, offset by non-cash benefits of $1.7 million due to deferred income taxes and $0.6 million due to amortization of discounts on investments. In addition, changes in operating assets and liabilities provided $4.8 million of cash for operating activities.

Cash flows from investing activities:

During the six months ended June 30, 2025, we received $23.6 million of investments, from sales and maturities, net of purchases, and purchased $1.6 million of property, plant and equipment, primarily related to the build-out of our manufacturing facility.

During the six months ended June 30, 2024, we received $45.7 million of investments, from sales and maturities, net of purchases, and purchased $6.7 million of property, plant and equipment, primarily related to the build-out of our manufacturing facility.

Cash flows from financing activities:

During the six months ended June 30, 2025, we paid $0.4 million in issuance costs related to a prior year equity issuance, $0.5 million related to the prior year preferred stock issuance costs, and $1.8 million to taxing authorities related to vesting of equity awards, and received $0.2 million from the exercise of stock options.

During the six months ended June 30, 2024, we received $0.1 million of proceeds from stock option exercises.

Future capital requirements

Our future capital requirements will depend on many factors, including:

- progress in our research and development programs, as well as the magnitude and speed of development of these programs;
- capital expenditures to building out our manufacturing capabilities, including the potential manufacturing of other product candidates;
- the speed and scale of building our commercial operations as we prepare for commercial readiness:
- the timing of regulatory approval of our product candidates and those of our collaborations;
- the timing, receipt, and amount of any payments received in connection with strategic transactions;
- the timing, receipt, and amount of upfront, milestone, and other payments, if any, from present and future collaborators, if any;
- the timing, receipt, and amount of sales and royalties, if any, from our product candidates;
- the timing and capital requirements to scale up our various product candidates and service offerings and customer acceptance thereof;
- our ability to maintain and establish new collaborative arrangements and/or new strategic initiatives;
- the resources, time, and cost required for the preparation, filing, prosecution, maintenance, and enforcement of our intellectual property portfolio;
- strategic mergers and acquisitions, if any, including both the upfront acquisition cost as well as the cost to integrate, maintain, and expand the strategic target; and
- the costs associated with legal activities, including litigation, arising in the course of our business activities and our ability to prevail in any such legal disputes.

Until such time, if ever, as we can regularly generate positive operating cash flows, we plan to finance our cash needs through a combination of equity offerings, debt or royalty monetization financings, government, or other third-party funding, strategic alliances, sales of assets, and licensing arrangements. We may not be able to raise sufficient additional funds on terms that are favorable to us, if at all. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our common shareholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common shareholders. Our current stock price may make it more

difficult to pursue equity financings and lead to substantial dilution if the price of our common stock does not increase. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, or declaring dividends. If we raise additional funds through strategic transactions, collaborations, or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs, or product candidates, or to grant licenses on terms that may not be favorable to us.

We are subject to a number of risks similar to those of other companies conducting high-risk, early-stage research and development of product candidates. Principal among these risks are dependence on key individuals and intellectual property, competition from other products and companies, and the technical risks associated with the successful research, development, and clinical manufacturing of its product candidates. Our success is dependent upon our ability to continue to raise additional capital in order to fund ongoing research and development, obtain regulatory approval of our products, successfully commercialize our products, generate revenue, meet our obligations, and, ultimately, attain profitable operations.

Our consolidated financial statements as of June 30, 2025 have been prepared on the basis that we will continue as a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business.

Based on current projections, management believes that its existing cash, cash equivalents and short-term investments, combined with anticipated potential revenue from the commercialization of PRGN-2012, which is outside of our direct control, will enable us to continue our operations for at least one year from the date of this filing. These assumptions include the receipt of future payments that are dependent upon the successful FDA approval of the PRGN-2012 BLA, and therefore revenue from this product is uncertain at this time. Based on this factor, we do not know when, or if, we will generate sufficient revenue from commercialization to offset our operating expenses. We are subject to all of the risks inherent in the development of new products, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. In addition, because our forecasted potential revenues are currently outside of our direct control, they have not been included in our going concern analysis. These conditions raise substantial doubt about our ability to continue as a going concern for at least 12 months after the issuance of the accompanying condensed consolidated financial statements appearing elsewhere in this Quarterly Report. Our financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Our ability to continue as a going concern is dependent upon the successful execution of management’s plans, which include the successful commercialization of PRGN-2012. In addition, we may decide, or be required to raise additional capital. This additional capital could be raised through a combination of non-dilutive financings (including debt financings, collaborations, strategic alliances, monetization of non-core assets, marketing, distribution or licensing arrangements), dilutive financings (including equity and/or debt financings with an equity component) and, ultimately from revenue related to product sales, to the extent our product candidates receive marketing approval and can be commercialized. There can be no assurance that new financings or other transactions will be available to us on commercially acceptable terms, or at all, and such financings may adversely affect the holdings or rights of our stockholders and may cause significant dilution to existing stockholders. The condensed consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty, which could have a material adverse effect on our financial condition.

See the section entitled "Risk Factors" in our Annual Report for additional risks associated with our substantial capital requirements.

Contractual obligations and commitments

The following table summarizes our significant contractual obligations and commitments from continuing operations as of June 30, 2025 and the effects such obligations are expected to have on our liquidity and cash flows in future periods:

	Total	Less Than 1 Year	1 - 3 Years	3 - 5 Years	More Than 5 Years
			(In thousands)		
Operating leases	$ 6,749	$ 1,494	$ 2,775	$ 2,479	$ —
Total	$ 6,749	$ 1,494	$ 2,775	$ 2,479	$ —

In addition to the obligations in the table above, as of June 30, 2025, we are party to license agreements with various third parties that contain future milestones and royalty payment obligations related to development milestones and/or commercial sales of products that incorporate or use their technologies. Because these agreements are generally subject to termination by us or are dependent on certain condition precedents within our control, no amounts are included in the tables above. As of June 30, 2025, we also had research and development commitments with third parties totaling $4.6 million that had not yet been incurred.

Off-balance sheet arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements as defined under SEC rules.

Critical accounting policies and estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our condensed consolidated financial statements, which we have prepared in accordance with generally accepted accounting principles in the United States. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenues and expenses during the reporting periods. We evaluate these estimates and judgments on an ongoing basis. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Our actual results may differ from these estimates under different assumptions or conditions.

There have been no material changes to our critical accounting policies from those described in "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Annual Report.

Recent accounting pronouncements

For information with respect to recent accounting pronouncements and the impact of these pronouncements on our condensed consolidated financial statements, see "Notes to the Condensed Consolidated Financial Statements (Unaudited) - Note 2" appearing elsewhere in this Quarterly Report.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The following sections provide quantitative information on our exposure to interest rate risk. We make use of sensitivity analyses that are inherently limited in estimating actual losses in fair value that can occur from changes in market conditions.

Interest rate risk

We had cash, cash equivalents and short-term and long-term investments of $59.8 million and $97.9 million as of June 30, 2025 and December 31, 2024, respectively. Our cash and cash equivalents and short-term investments consist of cash, money market funds, U.S. government debt securities, certificates of deposit, and corporate bonds. The primary objectives of our investment activities are to preserve principal, maintain liquidity, and maximize income without significantly increasing risk. Our cash and cash equivalents and short-term and long-term investments may be subject to market risk due to changes in prevailing interest rates that may cause the fair values of our investments to fluctuate. We believe that a hypothetical 100 basis point increase in

interest rates would not materially affect the fair value of our interest-sensitive financial instruments and any such losses would only be realized if we sold the investments prior to maturity.

Item 4. Controls and Procedures

Pursuant to Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), we carried out an evaluation, under supervision and with the participation of our management, including our Chief Executive Officer ("CEO"), who is our principal executive officer, and our Chief Financial Officer ("CFO"), who is our principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined under Rule 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. Based upon that evaluation, as of the end of the period covered by this report, our CEO and CFO concluded that our disclosure controls and procedures are effective at the reasonable assurance level to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act, is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

There has been no change in our internal control over financial reporting during the three months ended June 30, 2025, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

In the course of our business, we are involved in litigation or legal matters, including governmental investigations. Such matters are subject to many uncertainties and outcomes are not predictable with assurance. We accrue liabilities for such matters when it is probable that future expenditures will be made and such expenditures can be reasonably estimated. As of June 30, 2025, we do not believe that any such matters, individually or in the aggregate, will have a material adverse effect on our business, financial condition, results of operations, or cash flows.

See "Notes to the Condensed Consolidated Financial Statements (Unaudited) - Note 13" appearing elsewhere in this Quarterly Report for further discussion of ongoing legal matters.

Item 1A. Risk Factors

As disclosed in "Summary of Risk Factors" and "Item 1A. Risk Factors" in our Annual Report, there are a number of risks and uncertainties that may have a material effect on the operating results of our business and our financial condition. There are no additional material updates or changes to our risk factors since the filing of our Annual Report.

In evaluating our risks, readers also should carefully consider the risk factors discussed in our Annual Report, which could materially affect our business, financial condition, or operating results, in addition to the other information set forth in this report and in our other filings with the SEC.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults on Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit No.	Description
3.1	Articles of Amendment to the Amended and Restated Articles of Incorporation
31.1	Certification of Helen Sabzevari, Chief Executive Officer (Principal Executive Officer) of the Company, pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Harry Thomasian Jr., Chief Financial Officer (Principal Financial Officer) of the Company, pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Helen Sabzevari, Chief Executive Officer (Principal Executive Officer) of the Company, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Harry Thomasian Jr., Chief Financial Officer (Principal Financial Officer) of the Company, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101**	Interactive Data File (Quarterly Report on Form 10-Q, for the quarterly period ended June 30, 2025, formatted in Inline XBRL (eXtensible Business Reporting Language)). Attached as Exhibit 101.0 to this Quarterly Report on Form 10-Q are the following documents formatted in XBRL: (i) the Condensed Consolidated Balance Sheets as of June 30, 2025 and December 31, 2024, (ii) the Condensed Consolidated Statements of Operations for the three and six months ended June 30, 2025 and 2024, (iii) the Condensed Consolidated Statements of Comprehensive Loss for the three and six months ended June 30, 2025 and 2024, (iv) the Condensed Consolidated Statements of Mezzanine Equity and Shareholders' Equity (Deficit) for the three and six months ended June 30, 2025 and 2024, (v) the Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2025 and 2024, and (vi) the Notes to the Condensed Consolidated Financial Statements.
104**	Cover Page Interactive Data File (embedded within the Inline XBRL document).

** Furnished herewith.

† Portions of this exhibit have been redacted pursuant to Item 601(b)(10)(iv) of Regulation S-K.

SIGNATURES

Pursuant to the requirements 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.
(Registrant)

Date: August 12, 2025

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

ARTICLES OF AMENDMENT

OF

PRECIGEN, INC.

The undersigned, on behalf of the corporation set forth below, pursuant to Title 13.1, Chapter 9, Article 11 of the Code of Virginia, states as follows:

1. The name of the corporation is Precigen, Inc. (the "Corporation").

2. The amended and restated articles of incorporation of the Corporation (the "Articles") are hereby amended by deleting therefrom in its entirety the existing Subsection B of Article III of the Articles, and inserting in lieu thereof the following new Subsection B of Article III:

   B. The aggregate number of shares that the Corporation shall have authority to issue shall be 25,000,000 shares of Preferred Stock, no par value per share (hereinafter called "Preferred Stock"), and 700,000,000 shares of Common Stock, no par value per share (hereinafter called "Common Stock").

3. The foregoing amendment was adopted on June 26, 2025.

4. The amendment was proposed by the board of directors and submitted to the shareholders of the Corporation at the annual meeting of shareholders held on June 26, 2025 in accordance with the provisions of Title 13.1, Chapter 9 of the Code of Virginia, and:

   a. The designation, number of outstanding shares, and number of votes entitled to be cast on the amendment were:

Designation	Number of outstanding shares	Number of votes entitled to be cast
Common Stock, no par value per share	295,165,060	295,165,060

   There were no voting groups entitled to vote separately on the amendment.

   b. The total number of votes cast for and against the amendment was:

Designation	Total votes **FOR**	Total votes **AGAINST**
Common Stock, no par value per share	223,238,979	5,603,517

   c. The number of votes cast for the amendment was sufficient for approval.

[*Signature page follows*]

Executed in the name of the corporation by:

/s/ Donald P. Lehr
Name: Donald P. Lehr
Title: Chief Legal Officer
Date: July 24, 2025
Corporation's SCC ID No.: 06154801

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Helen Sabzevari, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 12, 2025

/s/ HELEN SABZEVARI
Helen Sabzevari
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Harry Thomasian Jr., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 12, 2025

/s/ HARRY THOMASIAN JR.
Harry Thomasian Jr.
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

I, Helen Sabzevari, Chief Executive Officer of Precigen, Inc. (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2025 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 12, 2025

/s/ HELEN SABZEVARI
Helen Sabzevari
Chief Executive Officer
(Principal Executive Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933 or the Securities Exchange Act of 1934 (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

I, Harry Thomasian Jr., Chief Financial Officer of Precigen, Inc. (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2025 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 12, 2025

/s/ HARRY THOMASIAN JR.
Harry Thomasian Jr.
Chief Financial Officer
(Principal Financial Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933 or the Securities Exchange Act of 1934 (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.