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

FORM 10-Q

(Mark one)

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2023
or

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

For the transition period from _____ to _____
Commission file number 001-39747

SEER, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**82-1153150**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**

3800 Bridge Parkway, Suite 102
Redwood City, California 94065
650-453-0000
(Address, including zip code and telephone number, including area code, of Registrant's principal executive offices)

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

Copies to:

Title of each class	**Trading Symbol(s)**	**Name of Exchange on which registered**
Common Stock, par value $0.00001	SEER	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	☐
		Smaller reporting company	☒
Non-accelerated filer	☒	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 November 3, 2023, the registrant had 59,780,244 shares of Class A common stock, $0.00001 par value per share, and 4,044,969 shares of Class B common stock, $0.00001 par value per share, outstanding.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q ("Quarterly Report") contains forward-looking statements. All statements other than statements of historical facts contained in this Quarterly Report, including statements regarding our future results of operations and financial position, business strategy, commercial activities and costs, research and development costs, timing and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that are in some cases beyond our control and may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "would," "expect," "plan," "anticipate," "could," "intend," "target," "project," "believe," "estimate," "predict," "potential," or "continue" or the negative of these terms or other similar expressions. Forward-looking statements contained in this Quarterly Report include, but are not limited to, statements about:

- estimates of our addressable market, market growth, key performance indicators, capital requirements and our needs for additional financing;
- our expectations regarding our financial performance, including among others, revenue, cost of revenue, gross profit, operating expenses, loss from operations and net losses;
- our ability to successfully implement our commercialization strategy and attract customers, including our plans for international expansion;
- the implementation of our business model, strategic plans and expected pricing for the Proteograph™ Product Suite;
- our expectations regarding the rate and degree of market acceptance of the Proteograph Product Suite;
- the impact of the Proteograph Product Suite on the field of proteomics and the size and growth of the addressable proteomics market;
- competitive companies and technologies and our industry;
- our ability to manage and grow our business;
- our ability to develop and commercialize new products;
- our ability to establish and maintain intellectual property protection for our products or avoid or defend claims of infringement;
- the performance of third-party manufacturers and suppliers;
- the potential effects of government regulation;
- our ability to hire and retain key personnel and to manage our future growth effectively;
- the volatility of the trading price of our Class A common stock;
- the benefits of the PrognomiQ, Inc. transaction;
- the impact of local, regional, and national and international economic conditions and events;
- the impact of macroeconomic factors, such as pandemics, inflation, supply chain interruptions and foreign hostilities, on our business; and
- our expectations about market trends.

We have based these forward-looking statements largely on our current expectations and projections about our business, the industry in which we operate and financial trends that we believe may affect our business, financial condition, results of operations and prospects, and these forward-looking statements are not guarantees of future performance or development. These forward-looking statements speak only as of the date of this Quarterly Report and are subject to a number of risks, uncertainties and assumptions described in the section titled “Risk Factors” and elsewhere in this Quarterly Report. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we undertake no obligation to update or revise any forward-looking statements contained herein to reflect events or circumstances after the date of this Quarterly Report, whether as a result of any new information, future events or otherwise.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Quarterly Report, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and you are cautioned not to unduly rely upon these statements.

PART I—FINANCIAL INFORMATION

Item 1. Financial Statements

SEER, INC.
Condensed Consolidated Balance Sheets
(Unaudited)
(in thousands, except share and per share amounts)

	September 30, 2023	December 31 2022
ASSETS		
Current assets:		
Cash and cash equivalents	$ 36,396	$
Short-term investments	294,852	3
Accounts receivable, net	5,492	
Related party receivables	1,502	
Other receivables	752	
Inventory	4,225	
Prepaid expenses and other current assets	2,903	
Total current assets	346,122	4
Long-term investments	49,573	
Operating lease right-of-use assets	25,774	
Property and equipment, net	21,730	
Restricted cash	524	
Other assets	1,130	
Total assets	$ 444,853	$ 4
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 753	$
Accrued expenses	9,147	
Deferred revenue	185	
Operating lease liabilities, current	2,310	
Other current liabilities	123	
Total current liabilities	12,518	
Operating lease liabilities, net of current portion	26,499	
Other noncurrent liabilities	157	
Total liabilities	39,174	
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Preferred stock, $0.00001 par value; 5,000,000 shares authorized as of September 30, 2023 and December 31, 2022; zero shares issued and outstanding as of September 30, 2023 and December 31, 2022	—	
Class A common stock, $0.00001 par value; 94,000,000 shares authorized as of September 30, 2023 and December 31, 2022; 59,932,008 and 59,366,077 shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	1	
Class B common stock, $0.00001 par value; 6,000,000 shares authorized as of September 30, 2023 and December 31, 2022; 4,044,969 shares issued and outstanding as of September 30, 2023 and December 31, 2022	—	
Additional paid-in capital	694,948	6
Accumulated other comprehensive loss	(1,296)	
Accumulated deficit	(287,974)	(2
Total stockholders' equity	405,679	4
Total liabilities and stockholders' equity	$ 444,853	$ 4

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

SEER, INC.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(Unaudited)

(in thousands, except share and per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	**2022**	**2023**	**2022**
Revenue:				
Product	$ 1,849	$ 2,571	$ 5,837	$ 7,126
Service	536	68	1,072	204
Related party	1,429	1,316	4,093	3,494
Grant and other	348	—	1,221	64
Total revenue	4,162	3,955	12,223	10,888
Cost of revenue:				
Product	1,181	1,371	3,735	4,674
Service	95	21	295	50
Related party	396	618	1,226	1,366
Grant and other	334	—	462	—
Total cost of revenue	2,006	2,010	5,718	6,090
Gross profit	2,156	1,945	6,505	4,798
Operating expenses:				
Research and development	13,232	11,564	41,854	33,167
Selling, general and administrative	14,769	15,447	45,882	43,917
Total operating expenses	28,001	27,011	87,736	77,084
Loss from operations	(25,845)	(25,066)	(81,231)	(72,286)
Other income (expense):				
Interest income	4,767	1,285	13,044	2,105
Other expense	(10)	(199)	(291)	(260)
Total other income	4,757	1,086	12,753	1,845
Net loss	$ (21,088)	$ (23,980)	$ (68,478)	$ (70,441)
Other comprehensive loss:				
Unrealized gain (loss) on available-for-sale securities	236	420	(45)	(2,157)
Comprehensive loss	$ (20,852)	$ (23,560)	$ (68,523)	$ (72,598)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.33)	$ (0.38)	$ (1.07)	$ (1.13)
Weighted-average common shares outstanding, basic and diluted	63,929,743	62,538,983	63,747,155	62,308,314

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

SEER, INC.
Condensed Consolidated Statements of Changes in Stockholders' Equity
(Unaudited)

(in thousands, except share amounts)

	Class A and Class B Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
	Shares	Amount				
Balance at December 31, 2022	63,411,046	$ 1	$ 667,739	$ (219,496)	$ (1,251)	$ 446,993
Issuance of Class A common stock from exercise of options and release of restricted stock units	328,273	—	30	—	—	30
Vesting of early exercised stock options and restricted Class A common stock	—	—	43	—	—	43
Stock-based compensation	—	—	8,724	—	—	8,724
Other comprehensive gain	—	—	—	—	1,158	1,158
Net loss	—	—	—	(23,959)	—	(23,959)
Balance at March 31, 2023	63,739,319	1	676,536	(243,455)	(93)	432,989
Issuance of Class A common stock from exercise of options and release of restricted stock units	121,784	—	20	—	—	20
Issuance of Class A common stock in connection with employee stock purchase plan	68,495	—	192	—	—	192
Vesting of early exercised stock options and restricted Class A common stock	—	—	37	—	—	37
Stock-based compensation	—	—	9,752	—	—	9,752
Other comprehensive loss	—	—	—	—	(1,439)	(1,439)
Net loss	—	—	—	(23,431)	—	(23,431)
Balance at June 30, 2023	63,929,598	1	686,537	(266,886)	(1,532)	418,120
Issuance of Class A common stock from exercise of options and release of restricted stock units	52,442	—	41	—	—	41
Repurchase of unvested Class A common stock	(5,063)	—	—	—	—	—
Vesting of early exercised stock options and restricted Class A common stock	—	—	36	—	—	36
Stock-based compensation	—	—	8,334	—	—	8,334
Other comprehensive gain	—	—	—	—	236	236
Net loss	—	—	—	(21,088)	—	(21,088)
Balance at September 30, 2023	63,976,977	$ 1	$ 694,948	$ (287,974)	$ (1,296)	$ 405,679

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

SEER, INC.
Condensed Consolidated Statements of Changes in Stockholders' Equity
(Unaudited)

(in thousands, except share amounts)

	Class A and Class B Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
	Shares	Amount				
Balance at December 31, 2021	62,015,483	$ 1	$ 629,981	$ (126,530)	$ (536)	$ 502,916
Issuance of Class A common stock from exercise of options and release of restricted stock units	283,251	—	773	—	—	773
Repurchase of Class A common stock	(5,841)	—	—	—	—	—
Vesting of early exercised stock options and restricted Class A common stock	—	—	44	—	—	44
Stock-based compensation	—	—	8,062	—	—	8,062
Other comprehensive loss	—	—	—	—	(1,691)	(1,691)
Net loss	—	—	—	(23,646)	—	(23,646)
Balance at March 31, 2022	62,292,893	1	638,860	(150,176)	(2,227)	486,458
Issuance of Class A common stock from exercise of options and release of restricted stock units	260,533	—	445	—	—	445
Issuance of Class A common stock in connection with employee stock purchase plan	56,753	—	420	—	—	420
Vesting of early exercised stock options and restricted Class A common stock	—	—	43	—	—	43
Stock-based compensation	—	—	8,378	—	—	8,378
Other comprehensive loss	—	—	—	—	(886)	(886)
Net loss	—	—	—	(22,815)	—	(22,815)
Balance at June 30, 2022	62,610,179	1	648,146	(172,991)	(3,113)	472,043
Issuance of Class A common stock from exercise of options and release of restricted stock units	26,575	—	169	—	—	169
Vesting of early exercised stock options and restricted Class A common stock	—	—	43	—	—	43
Stock-based compensation	—	—	9,073	—	—	9,073
Other comprehensive gain	—	—	—	—	420	420
Net loss	—	—	—	(23,980)	—	(23,980)
Balance at September 30, 2022	62,636,754	$ 1	$ 657,431	$ (196,971)	$ (2,693)	$ 457,768

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

SEER, INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

(in thousands)

	Nine Months Ended September 30,	
	2023	**2022**
OPERATING ACTIVITIES		
Net loss	$ (68,478)	$ (70,441)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	26,810	25,513
Depreciation and amortization	3,998	2,839
Loss on disposal of property and equipment	258	261
Net amortization (accretion) of premium (discount) on available-for-sale securities	(8,545)	307
Provision for inventory excess and obsolescence	825	—
Non-cash operating lease expense	164	1,497
Changes in operating assets and liabilities:		
Accounts receivable and other receivables	(728)	(2,234)
Prepaid expenses and other assets	(1,080)	(1,036)
Inventory	(1,634)	(2,372)
Accounts payable	(1,353)	(443)
Deferred revenue	52	(51)
Accrued liabilities and other liabilities	836	(364)
Net cash used in operating activities	(48,875)	(46,524)
INVESTING ACTIVITIES		
Purchases of property and equipment	(5,470)	(5,292)
Proceeds from disposal of property and equipment	—	170
Purchase of available-for-sale securities	(318,049)	(202,748)
Proceeds from sale of available-for-sale securities	2,990	—
Proceeds from maturities of available-for-sale securities	352,322	87,863
Net cash provided by (used in) investing activities	31,793	(120,007)
FINANCING ACTIVITIES		
Repurchase of Class A common stock	(13)	(20)
Proceeds from exercise of Class A common stock options	91	1,387
Proceeds from issuance of Class A common stock in connection with employee stock purchase plan	192	420
Net cash provided by financing activities	270	1,787
Net decrease in cash, cash equivalents and restricted cash	(16,812)	(164,744)
Cash, cash equivalents and restricted cash, beginning of period	53,732	233,337
Cash, cash equivalents and restricted cash, end of period	$ 36,920	$ 68,593
SUPPLEMENTAL DISCLOSURE OF NON-CASH ACTIVITIES		
Property and equipment purchases included in accounts payable and accrued expenses	$ 250	$ 828
Inventory transferred to property and equipment	$ 1,211	$ —
Lease liability obtained in exchange for right-of-use assets	$ 514	$ 6,855

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

1. ORGANIZATION AND DESCRIPTION OF THE BUSINESS

Seer, Inc. (the Company) was incorporated in Delaware on March 16, 2017, and is headquartered in Redwood City, California, with wholly-owned subsidiaries in Massachusetts and the United Kingdom. The Company is a life sciences company focused on capturing deep molecular insights from the proteome to enable novel insights and breakthroughs in the understanding of biology and disease. Since inception, the Company has devoted substantially all of its resources to research and development activities, including with respect to the Proteograph Product Suite, building its commercial infrastructure including manufacturing, operations, sales and marketing and service and support functions, establishing and maintaining our intellectual property portfolio, hiring personnel, raising capital, becoming a publicly-traded company, and providing general and administrative support for these activities.
The Company is subject to a number of risks, similar to other early-stage life science companies, including, but not limited to, development and commercialization of its products, market acceptance of its products, development by its competitors of new technological innovations, protection of its intellectual property, and raising additional capital.

Liquidity

As of September 30, 2023, the Company has incurred significant losses and has had negative cash flows from operations. As of September 30, 2023, the Company had cash and cash equivalents and short-term investments of $331.2 million and an accumulated deficit of $288.0 million. Management expects to continue to incur significant expenses for the foreseeable future and to incur operating losses in the near term while the Company makes investments to support its anticipated growth. The Company believes that its cash and cash equivalents and investments as of September 30, 2023 provide sufficient capital resources to continue its operations for at least 12 months from the issuance date of the accompanying unaudited condensed consolidated financial statements.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND BASIS OF PRESENTATION

Basis of Presentation and Principles of Consolidation

The unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP). The unaudited condensed consolidated financial statements include the accounts of Seer, Inc. and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated.

The unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes included in our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the Securities and Exchange Commission on March 6, 2023.

Use of Estimates

The preparation of unaudited condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and the disclosure of contingent assets and liabilities at the date of the unaudited condensed consolidated financial statements and the reported amounts of expenses during the reporting period. On an ongoing basis, the Company evaluates its estimates and assumptions, including, but not limited to, those related to the determination of stand-alone selling price for revenue recognition, stock-based compensation, allowance for credit losses, inventory valuation, useful lives and valuation of property and equipment, income tax uncertainties, and tax valuation allowances.

Management bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from those estimates.

Concentration of Credit Risk and Other Risks and Uncertainties

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash, cash equivalents, and investments. The Company maintains bank deposits in federally insured financial institutions, and these deposits may exceed federally insured limits. The Company is exposed to credit risk in the event of default by the financial institutions holding its cash and cash equivalents and issuers of investments to the extent account balances exceed the amount insured by the Federal Deposit Insurance Corporation (FDIC). On March 10, 2023, Silicon Valley Bank (SVB) was closed by the California Department of Financial Protection and Innovation and the FDIC was appointed as receiver. On March 27, 2023, First-Citizens Bank & Trust Company assumed all of SVB's deposits and loans. In light of the foregoing, the Company does not believe that it has exposure to loss as a result of SVB's receivership. As of September 30, 2023, the Company held $0.6 million in SVB and has not experienced any losses on its deposits of cash and cash equivalents.

For the three and nine months ended September 30, 2023, the Company recognized revenue from a related party that represented 34% and 33%, respectively, of the Company's total revenue. For the three and nine months ended September 30, 2022, the Company recognized revenue from a related party that represented 33% and 32%, respectively, of the Company's total revenue.

For the three and nine months ended September 30, 2023, 30% and 23%, respectively, of the total revenue was generated outside of the United States, primarily from countries in Asia and Europe. For the three and nine months ended September 30, 2022, 21% and 26%, respectively, of the total revenue was generated outside of the United States, primarily from countries in Asia and Europe.

As of September 30, 2023 and December 31, 2022, there was one related party customer which represented 21% and 25%, respectively, of the total accounts receivable balance. As of September 30, 2023, there was one additional customer which represented 14% of the total accounts receivable balance. As of December 31, 2022, there were two additional customers which represented 10% and 12% of the total accounts receivable balance.

Cash and Cash Equivalents and Restricted Cash

The Company considers all highly liquid investments with an original maturity of three months or less at the date of purchase to be cash equivalents. As of September 30, 2023 and December 31, 2022, all amounts recorded as cash and cash equivalents consist of cash and money market funds and are stated at fair value.

Restricted cash as of September 30, 2023 and December 31, 2022 represents cash held by a financial institution as security for a letter of credit issued to the lessor for one of the Company's operating leases and is classified as noncurrent.

The following table provides a reconciliation of cash and cash equivalents and restricted cash to the total amount presented in the unaudited condensed consolidated statements of cash flows (in thousands):

	September 30,	
	2023	2022
Cash and cash equivalents	$ 36,396	$ 68,069
Restricted cash	524	524
Total cash and cash equivalents and restricted cash	$ 36,920	$ 68,593

Investments

The Company has designated all investments, which includes U.S. Treasury securities, U.S. Non-Treasury securities, commercial paper, and corporate debt securities as available-for-sale, and therefore, such investments are reported at fair value, with unrealized gains and losses excluded from earnings and reported as a component of other comprehensive loss. The cost of available-for-sale securities is adjusted for the amortization of premiums and accretion of discounts to expected maturity. Such amortization and accretion are included in other income (expense)

on the consolidated statements of operations and comprehensive loss. Realized gains and losses and interest income on available-for-sale securities are also included in other income (expense). The cost of securities sold is based on the specific identification method. The Company determines the appropriate classification of its investments in debt securities at the time of purchase and reevaluates such designation at each balance sheet date. As of September 30, 2023, the Company classifies its available-for-sale securities as short-term investments or long-term investments based on the remaining contractual maturity of the securities.

All of the Company's investments are subject to a periodic impairment review. The Company recognizes an impairment charge when a decline in the fair value of its investments below the cost basis is judged to be other than temporary. Factors considered in determining whether a loss is temporary include the length of time and extent to which an investment's fair value has been less than its cost basis, the financial condition and near-term prospects of the investee, extent of the loss related to credit of the issuer, the expected cash flows from the security, the Company's intent to sell the security and whether or not the Company will be required to sell the security before the recovery of its amortized cost.

Any unrealized losses on available-for-sale debt securities that are attributed to credit risk are recorded to the consolidated statements of operations and comprehensive loss through an allowance for credit losses.

Accounts Receivable, Net

Accounts receivable consist of amounts due from customers for the sales of products and services, net of any allowance for credit losses. The Company's expected loss allowance methodology for receivables is developed using its historical collection experience, current and future economic market conditions and a review of the current aging status and financial condition of its customers. Balances are written off when they are ultimately determined to be uncollectible. There were $4,000 and $30,000 allowances for credit losses related to accounts receivable as of September 30, 2023 and December 31, 2022, respectively.

Leases

The Company adopted Accounting Standards Codification (ASC) Topic 842, *Leases* (ASC 842) during the fourth quarter of 2021, effective as of January 1, 2021. Under ASC 842, the Company determines if an arrangement is or contains a lease at contract inception.

Operating lease right-of-use (ROU) assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized based on the present value of lease payments over the lease term at the commencement date of the lease. ROU assets also include any initial direct costs incurred and any lease payments made at or before the lease commencement date, less any lease incentive received. The Company uses its incremental borrowing rate in determining the present value of lease payments based on the information available at the date of lease commencement. The incremental borrowing rate reflects the rate of interest that a lessee would have to pay to borrow, on a collateralized basis over a similar term, an amount equal to the lease payments in a similar economic environment. Lease expense for an operating lease is recognized on a straight-line basis over the lease term.

The Company elected to not separate non-lease components from the associated lease components and to not recognize ROU assets and lease liabilities for leases with a term of twelve months or less. Variable lease payments are primarily related to property taxes, insurance and common area maintenance, and are recognized as lease costs when incurred.

Revenue Recognition

The Company generates revenue primarily from sales of products and services. The Company's product, the Proteograph Product Suite, consists of an instrument with embedded software essential to the instrument's functionality and consumables. The Company began recognizing revenue from shipments of its Proteograph Product Suite during the second quarter of 2021. The service revenue primarily consists of revenue received from the

generation and analysis of proteomic data on behalf of the customer as well as platform evaluation agreements and revenue is recognized upon delivery of the reports.

The Company recognizes revenue when control of the products and services is transferred to its customers in an amount that reflects the consideration it expects to be entitled to receive from its customers in exchange for those products and services. This process involves identifying the contract with a customer, determining the performance obligations in the contract, determining the transaction price, allocating the transaction price to the distinct performance obligations in the contract, and recognizing revenue when the performance obligations have been satisfied. A performance obligation is considered distinct from other obligations in a contract when it provides a benefit to the customer either on its own or together with other resources that are readily available to the customer and is distinct within the context of the contract. The Company considers a performance obligation satisfied once it has transferred control of a good or service to the customer, meaning the customer has the ability to direct the use and obtain substantially all the economic benefits from the good or service.

Revenue is recorded net of discounts and sales taxes collected on behalf of governmental authorities. Customers are invoiced generally upon shipment, or upon order for services, and payment is typically due within 30 or 60 days. Cash received from customers in advance of product shipment or providing services is recorded as a contract liability. The Company's contracts with its customers generally do not include rights of return.

At times, the Company may enter into arrangements with payment terms which exceed one year from the transfer of control of the product or service. In such cases, the Company assesses whether the arrangement contains a significant financing component. If a significant financing component exists, the transaction price is adjusted for the financing portion of the arrangement, which is recorded as interest income over the payment term using the effective interest method. The Company does not assess whether a significant financing component exists when, at contract inception, the period between the transfer of control to a customer and final payment is one year or less.

The Company elected the practical expedient to account for shipping and handling activities that occur after the customer has obtained control as a fulfillment activity and not a separate performance obligation. The Company expenses incremental costs of obtaining a contract as and when incurred if the expected amortization period is one year or less or the amount is immaterial. The Company excludes from the transaction price all taxes assessed by a governmental authority on revenue-producing transactions that are collected by the Company from a customer.

The Company regularly enters into contracts that include various combinations of products and services, which are generally distinct and accounted for as separate performance obligations. The transaction price is allocated to each performance obligation in proportion to its standalone selling price. The Company determines the standalone selling price using average selling prices with consideration of current market conditions. If the product or service has no history of sales or if the sales volume is not sufficient, the Company relies upon prices set by management, adjusted for applicable discounts.

Grant and Other Revenue

Grant revenue represents funding under cost reimbursement programs from federal foundation sources for qualified research and development activities performed by the Company and are not based on estimates that are subject to change. Grants received are assessed to determine if the agreement should be accounted for as an exchange transaction or a contribution. An agreement is accounted for as a contribution if the resource provider does not receive commensurate value in return for the assets transferred. Such amounts are recorded as revenue as grant-funded activities are performed up to the amount of expenses incurred. Any advance funding payments are recorded as deferred revenue until the activities are performed.

A portion of the Company's revenue relates to lease arrangements. Standalone lease arrangements are outside the scope of Accounting Standards Codification (ASC) 606, *Revenue From Contracts With Customers*, and are therefore accounted for in accordance with ASC 842. The total consideration in a lease arrangement is allocated between lease and non-lease components on their relative stand-alone selling prices. The stand-alone selling price is based on the

price the Company would separately sell that promised good or service to a customer. If a stand-alone price is not available for a component, it is estimated using the best information available.

Shipping revenue is recognized when control of the product is transferred to the customer, and the related shipping and handling costs are included in the cost of products sold.

3. FAIR VALUE MEASUREMENTS AND FAIR VALUE OF FINANCIAL INSTRUMENTS

The following tables set forth the fair value of the Company's financial assets that were measured at fair value on a recurring basis by level within the fair value hierarchy (in thousands).

	September 30, 2023			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	$ 33,984	$ —	$ —	$ 33,984
Total cash equivalents	33,984	—	—	33,984
Investments:				
U.S. Treasury securities	—	246,652	—	246,652
U.S. Non-Treasury securities	—	22,741	—	22,741
Commercial paper	—	25,505	—	25,505
Corporate debt securities	—	49,527	—	49,527
Total investments	—	344,425	—	344,425
Total assets measured at fair value	$ 33,984	$ 344,425	$ —	$ 378,409

	December 31, 2022			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	$ 53,208	$ —	$ —	$ 53,208
Total cash equivalents	53,208	—	—	53,208
Investments:				
U.S. Treasury securities	—	227,692	—	227,692
U.S. Non-Treasury securities	—	10,702	—	10,702
Commercial paper	—	55,433	—	55,433
Corporate debt securities	—	79,361	—	79,361
Total investments	—	373,188	—	373,188
Total assets measured at fair value	$ 53,208	$ 373,188	$ —	$ 426,396

There were no financial liabilities measured at fair value. The Company classifies money market funds within Level 1 of the fair value hierarchy because they are valued using quoted market prices. The Company classifies its investments in U.S. Treasury securities (Treasury bills, Treasury notes, and Treasury bonds), U.S. Non-Treasury securities (government agency debt), commercial paper, and corporate debt securities as Level 2 instruments and obtains fair value from an independent pricing service, which may use quoted market prices for identical or comparable instruments or model-driven valuations using observable market data or inputs corroborated by observable market data.

The carrying amount of the Company's accounts receivable, other receivables, prepaid expenses and other current assets, accounts payable and accrued expenses approximate fair value due to their short maturities.

The following is a summary of the Company's cash equivalents and investments and the gross unrealized holding gains and losses (in thousands):

	September 30, 2023			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Assets:				
Cash equivalents:				
Money market funds	$ 33,984	$ —	$ —	$ 33,984
Total cash equivalents	33,984	—	—	33,984
Investments:				
U.S. Treasury securities	247,784	1	(1,133)	246,652
U.S. Non-Treasury securities	22,778	—	(37)	22,741
Commercial paper	25,527	—	(22)	25,505
Corporate debt securities	49,632	9	(114)	49,527
Total investments	345,721	10	(1,306)	344,425
Total assets measured at fair value	$ 379,705	$ 10	$ (1,306)	$ 378,409

	December 31, 2022			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Assets:				
Cash equivalents:				
Money market funds	$ 53,208	$ —	$ —	$ 53,208
Total cash equivalents	53,208	—	—	53,208
Investments:				
U.S. Treasury securities	228,563	25	(896)	227,692
U.S. Non-Treasury securities	10,699	6	(3)	10,702
Commercial paper	55,561	3	(131)	55,433
Corporate debt securities	79,616	6	(261)	79,361
Total investments	374,439	40	(1,291)	373,188
Total assets measured at fair value	$ 427,647	$ 40	$ (1,291)	$ 426,396

As of September 30, 2023 and December 31, 2022, unrealized losses on available-for-sale investments are not attributable to credit risk and are considered to be temporary. Approximately $1.0 million of the Company's investments have been in a continuous unrealized loss position for 12 months or longer. The Company believes it is more likely than not that investments in an unrealized loss position will be held until maturity or the recovery of the cost basis of the investment. To date, the Company has not recorded any impairment charges on marketable securities related to other-than-temporary declines in market value. As of September 30, 2023, $49.6 million of available-for-sale investments had remaining maturities between one and two years. The remainder of the available-for-sale investments have a remaining maturity of one year or less. As of September 30, 2023 and December 31, 2022, the Company recorded $0.7 million and $0.6 million of accrued interest, respectively, related to its available-for-sale investments as a component of other receivables on the condensed consolidated balance sheets.

4. OTHER FINANCIAL STATEMENT INFORMATION

Inventory

Inventory consists of the following (in thousands):

	September 30, 2023	December 31, 2022
Raw materials	$ 1,087	$ 2,129
Work-in-progress	191	271
Finished goods	2,947	2,227
Total inventory	$ 4,225	$ 4,627

Property and Equipment, Net

Property and equipment, net consists of the following (in thousands):

	September 30, 2023	December 31, 2022
Laboratory equipment	$ 26,648	$ 21,122
Computer equipment and software	863	876
Furniture and fixtures	684	575
Leasehold improvements	3,444	3,375
Construction-in-progress	1,123	1,281
Property and equipment	32,762	27,229
Less: accumulated depreciation and amortization	(11,032)	(7,821)
Total property and equipment, net	$ 21,730	$ 19,408

Depreciation and amortization expense related to property and equipment was $1.4 million and $1.0 million for the three months ended September 30, 2023 and 2022, respectively. Depreciation and amortization expense related to property and equipment was $4.0 million and $2.8 million for the nine months ended September 30, 2023 and 2022, respectively.

Accrued Expenses

Accrued expenses consist of the following (in thousands):

	September 30, 2023	December 31, 2022
Accrued compensation	$ 6,442	$ 6,139
Accrued taxes	539	335
Accrued professional services	358	322
Other	1,808	1,502
Total accrued expenses	$ 9,147	$ 8,298

5. REVENUE AND DEFERRED REVENUE

Product revenue consists of an instrument with embedded software essential to the instrument's functionality and consumables. Service revenue primarily consists of revenue received from the generation and analysis of proteomic data on behalf of the customer and platform evaluation agreements. Related party revenue is comprised of both the sale of products and services performed for related parties, as further discussed in Note 10. Grant and other revenue

consists of grant revenue from services performed specifically for the reimbursement of research-related expense and other revenue which relates to shipping revenue and lease arrangements, as further discussed below.

Deferred revenue activity for the period ended September 30, 2023 and December 31, 2022 are as follows (in thousands):

	September 30, 2023	December 31, 2022
Balance, beginning of period	$ 133	$ 376
Additions	732	233
Revenue recognized	(635)	(476)
Balance, end of period	$ 230	$ 133

Transaction price allocated to remaining performance obligations represents contracted revenue that has not yet been recognized, which includes deferred revenue and non-cancellable amounts that will be invoiced and recognized as revenues in future periods. As of September 30, 2023, $1.4 million of revenue is expected to be recognized from the remaining performance obligations, of which 98% is expected to be recognized within 12 months and the remainder thereafter.

Grant and Other Revenue

In August 2019, the Company received a notice of a Small Business Innovation Research (SBIR) grant award from the National Institutes of Health, which provides funding of approximately $1.1 million to the Company for its development of research applications. For the three and nine months ended September 30, 2023, the Company recognized $0.2 million and $0.9 million of grant revenue, respectively, with respect to the award. For the three and nine months ended September 30, 2022, the Company recognized no revenue and $64,000 of grant revenue, respectively.

6. CAPITAL STOCK AND STOCKHOLDERS' EQUITY

As of September 30, 2023, the Company is authorized to issue 105,000,000 shares of capital stock consisting of 94,000,000 shares of Class A common stock, 6,000,000 shares of Class B common stock, and 5,000,000 shares of preferred stock.

Common Stock

Common stock issued and outstanding is as follows:

	September 30, 2023	December 31, 2022
Class A common stock	59,932,008	59,366,077
Class B common stock	4,044,969	4,044,969
Total common stock issued and outstanding	63,976,977	63,411,046

Class A and Class B common stock have a par value of $0.00001 per share. Holders of Class A common stock are entitled to one vote per share and holders of Class B common stock are entitled to 10 votes per share. Class B common shares are convertible to Class A common shares at any time at the option of the holder on a one-for-one basis. Holders of common stock are entitled to dividends as declared by the Board of Directors, subject to rights of holders of all classes of stock outstanding having priority rights as to dividends. There have been no dividends declared to date.

Common stock issued and outstanding on the condensed consolidated balance sheets and condensed consolidated statements of changes in stockholders' equity includes shares related to early exercised options and restricted stock that are subject to repurchase option.

7. EQUITY INCENTIVE PLANS

As of September 30, 2023, there are 14,570,948 shares of Class A common stock reserved for issuance under the 2020 Equity Incentive Plan, 4,244,147 of which shares are available for issuance in connection with grants of future awards.

Stock Options

Stock option activity for the nine months ended September 30, 2023 is as follows:

	Options Outstanding	Weighted-Average Exercise Price
Balance at December 31, 2022	10,214,430	$ 13.90
Options granted	3,289,469	4.39
Options exercised	(37,234)	2.48
Options forfeited	(844,625)	9.65
Balance at September 30, 2023	12,622,040	$ 11.74
Vested and exercisable, September 30, 2023	6,680,980	$ 8.82

Market Condition Options

In February 2023, the Company granted options to purchase an aggregate of 1,794,000 shares of the Company's Class A common stock to certain Company executives, with vesting subject to market conditions (Market Condition Options). The Market Condition Options become eligible to vest if the average of the closing sales prices of a share of Class A common stock over a trailing twenty trading day period within seven years from the date of grant reaches a stock price of $6.885 per share (the Market Price Milestone). If the Market Price Milestone is achieved, 25% of each Market Condition Option will vest upon certification of such achievement, subject to the recipient's continued service through the Market Price Milestone achievement date, and an additional 25% of each Market Condition Option will then vest on each of the one-, two- or three-year anniversaries of the Market Price Milestone achievement date, respectively, subject to the recipient's continued service through the applicable anniversary date. In the event of the Company's change in control during the seven-year performance period, the performance period will be shortened, achievement of the Market Price Milestone will be assessed based on the per share value of consideration that stockholders receive in the transaction (the change in control price), and if the Market Price Milestone is achieved on that basis, each Market Condition Option will vest in full as of immediately prior to the change in control, subject to the recipient's continued service as of immediately prior to the change in control.

The Market Condition Option has a grant date fair value of approximately $5.2 million determined using a lattice-binomial option-pricing model based on a Monte Carlo simulation. The following assumptions were used to determine the grant date fair value of $2.80 - $3.02: (i) risk-free interest rate: 3.94%; (ii) expected volatility: 83.1%; and (iii) expected dividend yield: 0.0%. Compensation expense is recognized using an accelerated attribution method based on the derived service periods for each of the tranches. Failure to meet the market condition for an award does not result in reversal of previously recognized expense, so long as the service is provided for the duration of the respective derived service period.

The Company recognized compensation expense of $0.7 million and $2.1 million related to the Market Condition Options for the three and nine months ended September 30, 2023, respectively. As of September 30, 2023, there was $3.1 million in unrecognized compensation related to unvested Market Condition Options, which the Company expects to recognize over a remaining weighted-average period of 1.81 years.

Restricted Stock Awards

Certain stock options granted provide stock option holders the right to exercise unvested stock options in exchange for restricted shares of Class A common stock. The Company has also issued restricted shares of Class A common stock to employees and directors. There were 36,581 shares and 60,787 shares of restricted stock that were unvested and subject to repurchase option as of September 30, 2023 and December 31, 2022, respectively.

Restricted Stock Units

Restricted Stock Unit activity for the nine months ended September 30, 2023 is as follows:

	Restricted Stock Units	Weighted-Average Grant Date Fair Value
Balance at December 31, 2022	1,650,976	$ 18.23
Granted	2,646,780	4.50
Vested	(465,265)	18.46
Forfeited	(510,322)	7.86
Balance at September 30, 2023	3,322,169	$ 8.85

Employee Stock Purchase Plan

A total of 1,829,437 shares of Class A common stock are reserved for issuance under the 2020 Employee Stock Purchase Plan (ESPP) as of September 30, 2023. During the nine months ended September 30, 2023, 68,495 shares of Class A common stock were issued under the ESPP.

Stock-Based Compensation

The following table summarizes the components of stock-based compensation recognized in the Company's condensed consolidated statements of operations and comprehensive loss (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Cost of revenue	$ 392	$ 299	$ 1,127	$ 784
Research and development	2,242	2,395	7,523	6,788
Selling, general and administrative	5,700	6,379	18,160	17,941
Total stock-based compensation	$ 8,334	$ 9,073	$ 26,810	$ 25,513

In February 2022, in connection with a leave of absence taken by one of our executives, a total of 1,330,892 share-based awards were modified to extend the overall term and change the timing of the vesting of the awards. The total incremental stock-based compensation associated with the modification is $0.9 million, which will be recognized over the next eight years. Effective on September 30, 2022, the executive resigned from his position as President of the Company and the Company's Board of Directors.

On June 21, 2022, the Board of Directors approved an option repricing to reduce the exercise price of certain vested, outstanding, and unexercised stock options with an exercise price greater than $19.00 per share that were held by employees who were not members of the Board or Director or officers for purposes of Section 16 of the Securities Exchange Act of 1934, as amended ("Non-Section 16 employees") to $19.00 per share, which was the Company's initial public offering price. The Board of Directors also approved the repricing of certain unvested, outstanding, and unexercised stock options with an exercise price greater than $19.00 per share that were held by Non-Section 16 employees to $7.40 per share, which was the closing price of the Company's Class A common stock on the Nasdaq Global Select Market on the date of the approval of the repricing. Except for the exercise price, the amended stock options have the same terms and conditions (including vesting schedule, number of shares, and expiration date) and will continue to be governed by the terms of the 2020 Equity Incentive Plan.

As a result of the option repricing, the Company recorded $0.2 million and $0.5 million of incremental stock-based compensation expense for the three and nine months ended September 30, 2023, respectively. The total unrecognized incremental stock-based compensation associated with the option repricing is $1.2 million, which will be recognized over the next three years.

8. LEASES

As a lessee, the Company leases approximately 51,000 square feet of office and laboratory space in Redwood City, California with a lease term that is set to end on September 30, 2032. The Company has an option to renew all leased space for an additional five-year term at then-current market rates. In connection with the lease, the Company maintains a letter of credit issued to the lessor in the amount of $0.5 million as of September 30, 2023 and December 31, 2022, which is secured by restricted cash and is presented as noncurrent at each date based on the term of the underlying lease. In addition, the Company leases approximately 6,000 square feet of office space in San Diego, California pursuant to a lease that runs through September 2024.

As of September 30, 2023, the remaining weighted-average lease term was 8.9 years and the weighted-average incremental borrowing rate used to determine the operating lease liabilities was 6.2%.

The components of lease costs related to the Company's operating leases were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Operating lease costs	$ 1,038	$ 959	$ 3,114	$ 2,730
Variable lease costs	201	161	224	439
Short-term lease costs	—	73	20	211
Total lease costs	$ 1,239	$ 1,193	$ 3,358	$ 3,380

Variable lease costs are primarily comprised of common area maintenance.

As of September 30, 2023, future minimum commitments under the Company's non-cancellable facility operating leases are as follows:

Years ending December 31,	(in thousands)
2023 (remaining three months)	$ 991
2024	3,969
2025	3,846
2026	3,957
2027	4,072
Thereafter	21,065
Total undiscounted future minimum lease payments	37,900
Present value adjustment for minimum lease commitments	(9,091)
Total operating lease liabilities	$ 28,809

As a lessor, the Company has contracts for equipment leased to customers. The Company accounts for the non-lease component under the revenue recognition ASC 606 guidance and the lease component under ASC 842 guidance. For an arrangement that has been classified as a sales-type lease, revenue is recognized when the transfer of control of the underlying leased asset has occurred and the net investment lease recorded, which is calculated at the present value of the remaining lease payments due from the lessee.

9. COMMITMENTS AND CONTINGENCIES

Purchase Commitments and Obligations

The Company has certain purchase commitments related to its inventory management with certain manufacturing suppliers wherein the Company is required to purchase the amounts forecasted in a blanket purchase order within a certain time period. The contractual obligations represent future cash commitments and liabilities under agreements with third parties and exclude orders for goods and services entered into in the normal course of business that are not

enforceable or subject to change. These outstanding commitments amounted to $4.8 million and $5.7 million as of September 30, 2023 and December 31, 2022, respectively.

Guarantees and Indemnifications

In the normal course of business, the Company enters into agreements that contain a variety of representations and provide for general indemnification. The Company's exposure under these agreements is unknown because it involves claims that may be made against the Company in the future. The Company has entered into indemnification agreements with certain directors and officers that require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of the status or service as directors or officers. To date, the Company has not paid any claims or been required to defend any action related to its indemnification obligations. As of September 30, 2023 and December 31, 2022, the Company does not have any material indemnification claims that were probable or reasonably possible and consequently has not recorded related liabilities.

Contingencies

From time to time, the Company may become involved in legal proceedings arising in the ordinary course of business. The Company is not currently a party to any material legal proceedings.

10. RELATED PARTY TRANSACTIONS

In August 2020, the Company formed a new entity, PrognomiQ, Inc. (PrognomiQ), and entered into a stock purchase agreement with PrognomiQ, pursuant to which the Company transferred to PrognomiQ certain assets that comprised the Company's human diagnostics activities in exchange for all the outstanding equity interests of PrognomiQ. The Company subsequently completed a pro-rata distribution to its stockholders of most of the shares of capital stock of PrognomiQ.

The Company has concluded that PrognomiQ is a VIE due to its reliance on future financing and insufficient equity investment at risk. However, the Company is not the primary beneficiary of the VIE as it does not have the power to direct the activities that most significantly impact the economic performance of PrognomiQ and does not have control over the PrognomiQ board of directors. The Company has determined that it has the ability to exercise significant influence over PrognomiQ and therefore has accounted for its investment in PrognomiQ using the equity method. As of the year ended December 31, 2022, the carrying value of the Company's investment in PrognomiQ is nil due to recognized net losses based on its percentage of ownership in PrognomiQ.

PrognomiQ constitutes a related party and, as of each of September 30, 2023 and December 31, 2022, the Company held $1.5 million in related party receivables, on the condensed consolidated balance sheets representing amounts mainly due from product sales. For the three and nine months ended September 30, 2023, the Company recognized revenue of $1.4 million and $4.1 million, respectively, which is presented as related party revenue on the condensed consolidated statements of operations and comprehensive loss and is mainly due to sale of consumables. For the three and nine months ended September 30, 2022, the Company recognized revenue of $1.3 million and $3.5 million, respectively, which is presented as related party revenue on the condensed consolidated statements of operations and comprehensive loss and is comprised of the sale of instruments and consumables.

During 2022, a member of the Company's Board of Directors served as a board member and an executive officer at a company that is a customer of the Company. As of September 30, 2023 and December 31, 2022, the Company recorded nil and $0.3 million in related party receivables, respectively, on the condensed consolidated balance sheets, representing revenue from product sales. There was no revenue recognized for each of the three and nine months ended September 30, 2023 and 2022. The Company has a contract for equipment leased to this customer that has been classified as a sales-type lease. As of each of September 30, 2023 and December 31, 2022, the lease receivables related to the sales-type lease are $0.2 million. The lease receivables are presented as prepaid expenses and other current assets on the condensed consolidated balance sheets.

11. NET LOSS PER SHARE ATTRIBUTABLE TO COMMON STOCKHOLDERS

The following table shows the computation of basic and diluted net loss per share (in thousands, except share and per share data):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Numerator:				
Net loss attributable to common stockholders	$ (21,088)	$ (23,980)	$ (68,478)	$ (70,441)
Denominator:				
Weighted-average common shares used in computing net loss per share attributable to common stockholders, basic and diluted	63,929,743	62,538,983	63,747,155	62,308,314
Net loss per share attributable to common stockholders, basic and diluted	$ (0.33)	$ (0.38)	$ (1.07)	$ (1.13)

The following outstanding shares of potentially dilutive securities were excluded from the computation of diluted net loss per share attributable to common stockholders for the periods presented, because including them would have been anti-dilutive (on an as-converted basis):

	September 30,	
	2023	2022
Class A common stock options issued and outstanding	12,622,040	10,671,718
Restricted common stock subject to future vesting	36,581	92,691
Restricted stock units	3,322,169	1,627,838
Total	15,980,790	12,392,247

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

You should read the following discussion and analysis of our financial condition and results of operations together with our unaudited condensed consolidated financial statements and related notes included in Part I, Item 1 of this Quarterly Report. This discussion contains forward-looking statements that involve risks and uncertainties, including those described in the section titled "Special Note Regarding Forward Looking Statements." Our actual results and the timing of selected events could differ materially from those discussed below. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those set forth under the section titled "Risk Factors."

Overview

Our mission is to imagine and pioneer new ways to decode the secrets of the proteome to improve human health. Our first product, the Proteograph™ Product Suite (Proteograph), leverages our proprietary engineered nanoparticle (NP) technology to provide unbiased, deep, rapid and large-scale access to the proteome. The Proteograph Product Suite is an integrated solution that includes consumables, an automation instrument and software.
We believe that broader access to the proteome is essential, not only to understanding its complexity and accelerating biological insights, but also to expanding end-markets. These markets may include basic research and discovery, translational research, diagnostics and applied applications. To comprehend the complexity and dynamic nature of the proteome, researchers must perform population-scale, deep, unbiased interrogation of biological samples over time. We believe that this level of interrogation was not previously feasible and that the Proteograph can enable researchers to perform these types of proteomics studies.

Since we were incorporated in 2017, we have devoted substantially all of our resources to research and development activities, including with respect to the Proteograph Product Suite, building our commercial infrastructure including manufacturing, operations, sales and marketing and service and support functions, establishing and maintaining our intellectual property portfolio, hiring personnel, raising capital, becoming a publicly-traded company, and providing general and administrative support for these activities.

Our ability to generate product revenue sufficient to achieve profitability, if ever, will depend on the successful commercialization of the Proteograph Product Suite. We are commercializing the Proteograph Product Suite as an integrated solution comprised of consumables, our SP100 automation instrument and software. Our commercial strategy is focused on growing adoption by the research community of the Proteograph, expanding the installed base and increasing utilization to generate revenue from the purchase of Proteograph consumables. We expect a highly efficient sales model because our workflow integrates with most existing proteomics laboratories' workflows and also complements large-scale genomics research.

We are broadly commercializing the Proteograph Product Suite through a direct sales channel in the United States, and through both direct and distributor sales channels in regions outside the United States. Since we are in the early stages of commercialization, we have built, and will continue to build, our sales, marketing, support and product distribution capabilities. In addition, we will continue to build the necessary infrastructure for these activities in the United States, European Union, the United Kingdom, and other countries and regions, including Asia-Pacific, as we execute on our commercialization strategy for the Proteograph.

We leverage well-established unit operations to formulate and manufacture our NPs at our facilities in Redwood City, California. We procure certain components of our consumables from third-party manufacturers, which includes the commonly-available raw materials needed for manufacturing our proprietary engineered NPs. We are currently manufacturing using our production-scale and pilot lines and continue to build out our manufacturing capabilities to support broad commercial availability of our products. We obtain some of the reagents and components used in the Proteograph workflow from third-party suppliers. While some of these reagents and components are currently sourced from a single supplier, these products are readily available from numerous suppliers. While we currently perform some filling and packaging of the Proteograph assay and the related consumables, we may eventually have our filling and packaging outsourced to a third party. We conduct vendor and component qualification for components provided by third-party suppliers and quality control tests on our NPs.

We designed the SP100 automation instrument and have outsourced its manufacturing to Hamilton Company, a leading manufacturer of automated liquid handling workstations. We have entered into a non-exclusive agreement with Hamilton that covers the manufacturing of the SP100 automation instrument and its continued supply on a purchase order basis. The agreement has an initial term that runs three years following our commercial launch. We have the option to extend the term of the agreement with Hamilton upon written notice at the end of the initial term; provided that prices are only fixed during the initial term of the agreement. Hamilton has represented to us that it maintains ISO 9001 and ISO 13485 certification.

During the nine months ended September 30, 2023 and 2022, we incurred a net loss of $68.5 million and $70.4 million, respectively, and used $48.9 million and $46.5 million of cash in operations, respectively. As of September 30, 2023, we had an accumulated deficit of $288.0 million and cash, cash equivalents and investments of $380.8 million. We expect to continue to incur significant and increasing losses and do not expect positive cash flows from operations for the foreseeable future.

We expect our expenses to increase in connection with our ongoing activities, as we:

- broadly commercialize the Proteograph Product Suite;
- attract, hire and retain qualified personnel;
- continue to build our sales, marketing, service, support and distribution infrastructure as part of our commercialization efforts;
- build-out and expand our in-house NP manufacturing capabilities;
- continue to engage in research and development of other products and enhancements to the Proteograph Product Suite;
- implement operational, financial and management information systems;
- obtain, maintain, expand, and protect our intellectual property portfolio; and
- build the infrastructure to operate and scale as a public company.

Components of Results of Operations

Revenue

Our product revenue consists of an instrument with embedded software essential to the instrument's functionality and consumables. Our service revenue primarily consists of revenue received from the generation and analysis of proteomic data on behalf of the customer and platform evaluation agreements. Our related party revenue consists primarily of product sales to related parties. Our grant and other revenue consists of research-related grants, lease arrangements, and shipping revenue. Our revenue is primarily generated domestically. We intend to focus our commercial efforts in the United States and expect to grow our international presence.

Cost of Revenue

We utilize third-party manufacturers for production of our SP100 instrument and we manufacture our NPs and assemble our assay kits internally. Cost of revenue consists primarily of costs of the components of the Proteograph Product Suite, including the SP100 instrument and consumables and distribution-related expenses such as logistics and shipping costs. In addition, cost of revenue includes employee compensation, such as stock-based compensation and employee benefits, allocated overhead and charges related to inventory reserves.

Research and Development Expenses

Research and development, or R&D, expenses include costs associated with R&D of our technology and product candidates. R&D expenses consist primarily of employee compensation, including stock-based compensation and

employee benefits, laboratory supplies used for in-house research, consulting costs, and allocated costs, including rent, depreciation, information technology and utilities.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consist primarily of employee compensation, including stock-based compensation, and benefits for executive management, sales and marketing, finance, administrative, human resources, legal functions, allocated costs, professional service fees and other general overhead costs to support our operations.

Interest Income

Interest income consists of interest earned on cash, cash equivalents and investments.

Results of Operations

Comparisons of the Three Months Ended September 30, 2023 and 2022

The following table summarizes our results of operations for the periods presented:

	Three Months Ended September 30,		Change	
	2023	2022	Amount	%
	(dollars in thousands)			
Revenue:				
Product	$ 1,849	$ 2,571	$ (722)	(28)%
Service	536	68	468	688 %
Related party	1,429	1,316	113	9 %
Grant and other	348	—	348	100 %
Total revenue	4,162	3,955	207	5 %
Cost of revenue:				
Product	1,181	1,371	(190)	(14)%
Service	95	21	74	352 %
Related party	396	618	(222)	(36)%
Grant and other	334	—	334	100 %
Total cost of revenue	2,006	2,010	(4)	— %
Gross profit	2,156	1,945	211	11 %
Operating expenses:				
Research and development	13,232	11,564	1,668	14 %
Selling, general and administrative	14,769	15,447	(678)	(4)%
Total operating expenses	28,001	27,011	990	4 %
Loss from operations	(25,845)	(25,066)	(779)	3 %
Other income (expense):				
Interest income	4,767	1,285	3,482	271 %
Other expense	(10)	(199)	189	(95)%
Total other income	4,757	1,086	3,671	338 %
Net loss	$ (21,088)	$ (23,980)	$ 2,892	(12)%

Revenue

	Three Months Ended September 30,		Change	
	2023	2022	Amount	%
	(dollars in thousands)			
Revenue	$ 4,162	$ 3,955	$ 207	5 %

Revenue increased by $0.2 million, or 5%, from $4.0 million during the three months ended September 30, 2022 to $4.2 million during the three months ended September 30, 2023, primarily due to increased instrument sales, services, and grant and other revenue, offset by lower consumables sales. Revenue primarily consisted of sales of the Proteograph SP100 instrument, consumables, platform evaluations, and service revenue, of which $1.4 million was attributed to related party. Also, revenue from our grant-funded activities related to our Small Business Innovation Research (SBIR) grant from the National Institutes of Health Grant (NIH) increased between the two periods by $0.2 million and shipping revenue increased between the two periods by $0.2 million.

Cost of Revenue

	Three Months Ended September 30,		Change	
	2023	2022	Amount	%
	(dollars in thousands)			
Cost of revenue	$ 2,006	$ 2,010	$ (4)	— %

Cost of revenue remained flat during the three months ended September 30, 2023. Cost of revenue consists of costs of the SP100 instrument, consumable kits and other related costs, including labor and overhead.

Research and Development

	Three Months Ended September 30,		Change	
	2023	2022	Amount	%
	(dollars in thousands)			
Research and development	$ 13,232	$ 11,564	$ 1,668	14 %

R&D expenses increased by $1.7 million, or 14%, from $11.6 million during the three months ended September 30, 2022 to $13.2 million during the three months ended September 30, 2023. The increase was primarily due to an increase in product development efforts related to the Proteograph Product Suite, including $0.4 million in employee compensation costs, $0.5 million in general business expenses, $0.6 million increase in allocated costs and $0.4 million in depreciation. The increase was offset by a $0.2 million decrease in stock-based compensation expense.

Selling, General and Administrative

	Three Months Ended September 30,		Change	
	2023	2022	Amount	%
	(dollars in thousands)			
Selling, general and administrative	$ 14,769	$ 15,447	$ (678)	(4)%

Selling, general and administrative expenses decreased by $0.7 million, or 4%, from $15.4 million during the three months ended September 30, 2022 to $14.8 million during the three months ended September 30, 2023, primarily due to a $0.7 million decrease in professional services.

Total Other Income

	Three Months Ended September 30,		Change	
	2023	2022	Amount	%
	(dollars in thousands)			
Total other income	$ 4,757	$ 1,086	$ 3,671	338 %

Total other income increased by $3.7 million, or 338%, from $1.1 million during the three months ended September 30, 2022 to $4.8 million during the three months ended September 30, 2023. The increase was due to higher rates of interest earned on cash invested in money market funds, U.S. Treasury securities, commercial paper, corporate securities, and government agency debt during the three months ended September 30, 2023.

Results of Operations

Comparisons of the Nine Months Ended September 30, 2023 and 2022

The following table summarizes our results of operations for the periods presented:

	Nine Months Ended September 30,		Change	
	2023	2022	Amount	%
	(dollars in thousands)			
Revenue:				
Product	$ 5,837	$ 7,126	$ (1,289)	(18)%
Service	1,072	204	868	425 %
Related party	4,093	3,494	599	17 %
Grant and other	1,221	64	1,157	1808 %
Total revenue	12,223	10,888	1,335	12 %
Cost of revenue:				
Product	3,735	4,674	(939)	(20)%
Service	295	50	245	490 %
Related party	1,226	1,366	(140)	(10)%
Grant and other	462	—	462	100 %
Total cost of revenue	5,718	6,090	(372)	(6)%
Gross profit	6,505	4,798	1,707	36 %
Operating expenses:				
Research and development	41,854	33,167	8,687	26 %
Selling, general and administrative	45,882	43,917	1,965	4 %
Total operating expenses	87,736	77,084	10,652	14 %
Loss from operations	(81,231)	(72,286)	(8,945)	12 %
Other income (expense):				
Interest income	13,044	2,105	10,939	520 %
Other expense	(291)	(260)	(31)	12 %
Total other income	12,753	1,845	10,908	591 %
Net loss	$ (68,478)	$ (70,441)	$ 1,963	(3)%

Revenue

	Nine Months Ended September 30,		Change	
	2023	2022	Amount	%
	(dollars in thousands)			
Revenue	$ 12,223	$ 10,888	$ 1,335	12 %

Revenue increased by $1.3 million, or 12%, from $10.9 million during the nine months ended September 30, 2022 to $12.2 million during the nine months ended September 30, 2023, primarily due to increased consumables sales, services, and grant and other revenue, offset by fewer instrument sales. Revenue recognized primarily consisted of sales of the Proteograph SP100 instrument, consumables, platform evaluations, and service revenue, of which $4.1 million was attributed to related party. Also, revenue from our grant-funded activities related to our SBIR grant from NIH increased between the two periods by $0.9 million. Shipping revenue increased between the two periods by $0.2 million. Lease revenue increased between the two periods by $0.1 million.

Cost of Revenue

	Nine Months Ended September 30,		Change	
	2023	2022	Amount	%
	(dollars in thousands)			
Cost of revenue	$ 5,718	$ 6,090	$ (372)	(6)%

Cost of revenue decreased by $0.4 million, or 6%, from $6.1 million during the nine months ended September 30, 2022 to $5.7 million during the nine months ended September 30, 2023, primarily due to increased consumable kit sales and service revenue, which carry a lower cost of revenue, and lower product revenue from fewer instrument sales, which have a higher cost of revenue, offset by increased overhead expenses, warranty, and other costs of revenue. Cost of revenue consists of costs of the SP100 instrument, consumable kits and other related costs, including labor and overhead.

Research and Development

	Nine Months Ended September 30,		Change	
	2023	2022	Amount	%
	(dollars in thousands)			
Research and development	$ 41,854	$ 33,167	$ 8,687	26 %

R&D expenses increased by $8.7 million, or 26%, from $33.2 million during the nine months ended September 30, 2022 to $41.9 million during the nine months ended September 30, 2023. The increase was primarily due to an increase in product development efforts related to the Proteograph Product Suite, including $3.1 million in employee compensation costs and other related expenses, a $0.7 million increase in stock-based compensation due to an increase in research and development personnel and a $2.3 million increase in allocated costs. Other increases are attributable to a $1.2 million increase in general business expenses, $0.9 million increase in depreciation of laboratory equipment, and $0.5 million increase in professional expenses.

Selling, General and Administrative

	Nine Months Ended September 30,		Change	
	2023	2022	Amount	%
	(dollars in thousands)			
Selling, general and administrative	$ 45,882	$ 43,917	$ 1,965	4 %

Selling, general and administrative expenses increased by $2.0 million, or 4%, from $43.9 million during the nine months ended September 30, 2022 to $45.9 million during the nine months ended September 30, 2023, primarily due to a $3.5 million increase in employee compensation costs and a $0.2 million increase in stock-based compensation. Other increases are attributable to a $0.2 million increase in depreciation and $0.2 million increase in travel expenses. The increase was offset by a $2.1 million decrease in professional services.

Total Other Income

	Nine Months Ended September 30,		Change	
	2023	2022	Amount	%
	(dollars in thousands)			
Total other income	$ 12,753	$ 1,845	$ 10,908	591 %

Total other income increased by $10.9 million, or 591%, from $1.8 million during the nine months ended September 30, 2022 to $12.8 million during the nine months ended September 30, 2023. The increase was due to higher rates of interest earned on cash invested in money market funds, U.S. Treasury, commercial paper, corporate securities, and government agency debt during the nine months ended September 30, 2023.

Liquidity and Capital Resources

Since the date of our incorporation, we have incurred significant operating losses and negative cash flows from operations. Our operations have been funded primarily through the sale and issuance of equity securities since inception. We anticipate that we will continue to incur net losses and do not expect positive cash flows from operations for the foreseeable future. However, based on our cash and cash equivalents and investments, we believe we will have adequate liquidity over the next twelve months following the date of this Quarterly Report of Form 10-Q to operate our business and to meet our cash requirements.

We enter into agreements as a part of the normal course of business with various vendors, which are generally cancellable without material penalty upon written notice. Payments associated with these agreements are not included in this discussion of contractual obligations.

Our operating lease obligations reflect our lease obligations for our office and laboratory space in Redwood City, California and office space in San Diego, California. We lease approximately 51,000 square feet of office and laboratory space in Redwood City, California, and the lease is set to end on September 30, 2032 with an option to renew for an additional five-year term at then-current market rates. We maintain a letter of credit issued to the lessor in the amount of $0.5 million as of September 30, 2023 and December 31, 2022, which is secured by restricted cash and is presented as noncurrent at each date based on the term of the underlying lease. We lease approximately 6,000 square feet of office space in San Diego, California that runs through September 2024.

We have certain purchase commitments related to our inventory management with certain manufacturing suppliers wherein we are required to purchase the amounts forecasted in a blanket purchase order within a certain time period. The contractual obligations represent future cash commitments and liabilities under agreements with third parties and exclude orders for goods and services entered into in the normal course of business that are not enforceable or subject to change. These outstanding commitments amounted to $4.8 million as of September 30, 2023.

We take a long-term view in growing and scaling our business and regularly review opportunities that meet our long-term growth objectives. Our future capital requirements will depend on many factors including our revenue

growth rate, investments in continued commercialization efforts, acquisitions of complementary or enhancing technologies or businesses, including intellectual property rights, the timing and extent of additional capital expenditures to invest in existing and new facilities, the expansion of sales and marketing and international activities and the extent and magnitude of our ongoing research and development programs.

We believe that our existing cash and cash equivalents and investments will be sufficient to meet our anticipated cash requirements for more than 12 months from the date of this Quarterly Report on Form 10-Q. If our available cash, cash equivalents and investments and anticipated cash flows from operations are insufficient to satisfy our liquidity requirements, we may consider raising additional capital to expand our business, to pursue strategic investments, to take advantage of financing opportunities or for other reasons.

Cash Flows

The following table summarizes our cash flows for the periods indicated:

	Nine Months Ended September 30,	
	2023	**2022**
	(in thousands)	
Net cash used in operating activities	$ (48,875)	$ (46,524)
Net cash provided by (used in) investing activities	31,793	(120,007)
Net cash provided by financing activities	270	1,787
Net decrease in cash, cash equivalents and restricted cash	$ (16,812)	$ (164,744)

Operating Activities

During the nine months ended September 30, 2023, cash used in operating activities was $48.9 million, which was attributable to a net loss of $68.5 million and a net change in our net operating assets and liabilities of $3.9 million, partially offset by non-cash charges of $23.5 million. Non-cash charges primarily consisted of $26.8 million in stock-based compensation, $4.0 million of depreciation and amortization, $0.8 million of provision for inventory excess and obsolescence, $0.3 million of loss on disposal of property and equipment, and $0.1 million of non-cash operating lease expense, offset by $8.5 million of net accretion of premiums on available-for-sale securities. The change in our net operating assets and liabilities was primarily due to a decrease in inventory levels of $1.6 million, a decrease in accounts receivable of $1.2 million, a decrease in accounts payable of $1.4 million and partially offset by an increase in related party receivables of $0.3 million.

During the nine months ended September 30, 2022, cash used in operating activities was $46.5 million, which was attributable to a net loss of $70.4 million and a net change in our net operating assets and liabilities of $6.5 million, partially offset by non-cash charges of $30.4 million. Non-cash charges primarily consisted of $25.5 million in stock-based compensation, $2.8 million of depreciation and amortization, $1.5 million of non-cash operating lease expense, $0.3 million of net amortization of premiums on available-for-sale securities, and $0.3 million of loss on disposal of property and equipment. The change in our net operating assets and liabilities was primarily due to an increase in inventory levels of $2.4 million for anticipated revenue growth, an increase in accounts receivable of $2.0 million from greater revenue, an increase in prepaid expenses and other current assets of $0.7 million, an increase in other receivables of $0.6 million, a decrease in accounts payable of $0.4 million and a decrease of $0.2 million in accrued expenses related to employee compensation. The decrease is partially offset by an increase in other current liabilities of $0.2 million.

Investing Activities

During the nine months ended September 30, 2023, cash provided by investing activities was $31.8 million, which was attributable to the proceeds from maturities of available-for-sale securities of $352.3 million and proceeds from sale of available-for-sale securities of $3.0 million. This was offset by the purchases of available-for-sale securities of $318.0 million and purchases of property and equipment, primarily for laboratory equipment of $5.5 million.

During the nine months ended September 30, 2022, cash used in investing activities was $120.0 million, which related to purchases of available-for-sale securities, net of proceeds from maturities, of $114.9 million, and $5.3 million in payments primarily for laboratory equipment.

Financing Activities

During the nine months ended September 30, 2023, cash provided by financing activities was $0.3 million, which was primarily attributable to proceeds of $0.2 million from the issuance of Class A common stock in connection with the employee stock purchase plan and net proceeds of $0.1 million from the exercise of stock options.

During the nine months ended September 30, 2022, cash provided by financing activities was $1.8 million. This was attributable to net proceeds from the exercise of stock options of $1.4 million and $0.4 million of proceeds from issuance of Class A common stock in connection with the employee stock purchase plan.

Critical Accounting Policies, Significant Judgments and Use of Estimates

The discussion and analysis of our financial condition and results of operations is based on our unaudited condensed consolidated financial statements, which have been prepared in accordance with United States generally accepted accounting principles. The preparation of these unaudited condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, and the disclosure of contingent assets and liabilities at the date of the unaudited condensed consolidated financial statements, as well as revenue and expenses incurred during the reporting periods. Our estimates are based on our 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. Actual results may differ from these estimates under different assumptions or conditions. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

There have been no significant changes in our critical accounting policies and estimates as compared to the critical accounting policies and estimates disclosed in the section titled "Management's Discussion and Analysis of Financial Condition and Operations" included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022.

Recent Accounting Pronouncements

See Note 2 to our unaudited condensed consolidated financial statements included elsewhere in this Quarterly Report for more information about recent accounting pronouncements, the timing of their adoption, and our assessment, to the extent we have made one yet, of their potential impact on our financial condition of results of operations.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

We have exposure to interest rate risk that relates to our cash, cash equivalents and investments held in money market funds, U.S. Treasury securities, commercial paper, corporate securities, and government agency securities. The goals of our investment policy are liquidity and capital preservation. We believe that we do not have any material exposure to changes in the fair value of these assets as a result of changes in interest rates due to the short-term nature of our cash and cash equivalents and investments.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer (CEO), and Chief Financial Officer (CFO), we evaluated the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as

amended (the Exchange Act), as of the end of the period covered by this report. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports 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 the CEO and the CFO, to allow timely decisions regarding required disclosures. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on that evaluation, our CEO and CFO have concluded, as of September 30, 2023, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed 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 disclosures.

Inherent Limitations on Effectiveness of Controls

Our management, including our CEO and CFO, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within a company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of controls effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) under the Exchange Act) during the quarter ended September 30, 2023 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

We are not currently a party to any material legal proceedings. From time to time we may be involved in legal proceedings or investigations, which could have an adverse impact on our reputation, business and financial condition and divert the attention of our management from the operation of our business.

Item 1A. Risk Factors

Investing in our Class A common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this Quarterly Report, including our unaudited condensed consolidated financial statements and the related notes and the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Quarterly Report, before deciding whether to invest in our Class A common stock. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations and prospects. In such an event, the market price of our Class A common stock could decline, and you may lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations and the market price of our Class A common stock.

Summary Risk Factor

Our business is subject to numerous risks and uncertainties that you should consider before investing in our company, as more fully described below. The principal factors and uncertainties that make investing in our company risky include, among others:

- we are an early-stage life sciences technology company with a history of net losses, which we expect to continue, and we may not be able to generate meaningful revenues or achieve and sustain profitability in the future;
- we have a limited operating history, which may make it difficult to evaluate our current business and the prospects for our future viability, and to predict our future performance;
- our operating results may fluctuate significantly in the future, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide;
- the size of the markets for the Proteograph Product Suite may be smaller than estimated, and new market opportunities may not develop as quickly as we expect, or at all, limiting our ability to successfully sell our products;
- we are in the early stages of our commercialization plan, and we may not be able to commercialize the Proteograph Product Suite as planned;
- our commercialization success depends on broad scientific and market acceptance of the Proteograph, which we may fail to achieve;
- even if the Proteograph Product Suite is successfully commercialized and achieves broad scientific and market acceptance, if we fail to improve it or introduce compelling new products or services, our revenues and our prospects could be harmed;
- health epidemics such as the COVID-19 pandemic could continue to adversely impact our business and operations;
- if we are unable to obtain and maintain sufficient intellectual property protection for our products and technology, or if the scope of the intellectual property protection obtained is not sufficiently broad, our

competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products may be impaired;

- if we are unable to identify and recruit qualified employees, and retain or maintain our employee base, it may adversely impact our business and operations; and
- if we fail to maintain an effective system of internal controls, or otherwise fail to comply with the Sarbanes-Oxley Act of 2002, we may not be able to accurately and timely report our financial results, which may adversely affect our business and investor confidence in us and, as a result, the value of our Class A common stock.

Risks Related to Our Business and Industry

We are an early-stage life sciences technology company with a history of net losses, which we expect to continue, and we may not be able to generate meaningful revenues or achieve and sustain profitability in the future.

We are an early-stage life sciences technology company, and we have incurred significant losses since we were formed in 2017, and expect to continue to incur losses in the future. We incurred net losses of $21.1 million and $24.0 million during the three months ended September 30, 2023 and 2022, respectively. We incurred net losses of $68.5 million and $70.4 million during the nine months ended September 30, 2023 and 2022, respectively. As of September 30, 2023, we had an accumulated deficit of $288.0 million. These losses and accumulated deficit were primarily due to the substantial investments we have made to develop and improve our technology and the Proteograph Product Suite. Over the next several years, we expect to continue to devote substantially all of our resources towards continuing development and commercialization of the Proteograph Product Suite, including sales and marketing, manufacturing and operations costs, and research and development efforts for products. These efforts may prove more costly than we currently anticipate. While we have generated product revenue, we may never generate revenue sufficient to offset our expenses. In addition, as a public company, we incur significant legal, accounting, administrative, insurance and other expenses. Accordingly, we cannot assure you that we will achieve profitability in the future or that, if we do become profitable, we will sustain profitability.

We have a limited operating history, which may make it difficult to evaluate our current business and the prospects for our future viability, and to predict our future performance.

We are in the early stages of commercialization of the Proteograph Product Suite. Our operations to date have been primarily focused on developing our technology and products. Our prospects must be considered in light of the uncertainties, risks, expenses, and difficulties frequently encountered by companies in their early stages of operations. Consequently, predictions about our future success or viability are highly uncertain and may not be as accurate as they could be if we had a longer operating history or a company history of successfully developing and commercializing products.

In addition, as a business with a limited operating history, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown obstacles. As we continue to transition from a company with a focus on research and development to a company capable of supporting broad commercial activities as well, we may not be successful in such a transition. We have encountered in the past, and will encounter in the future, risks and uncertainties frequently experienced by growing companies with limited operating histories in emerging and rapidly changing industries. If our assumptions regarding these risks and uncertainties, which we use to plan and operate our business, are incorrect or change, or if we do not address these risks successfully, our results of operations could differ materially from our expectations, and our business, financial condition and results of operations could be adversely affected.

Our operating results may fluctuate significantly in the future, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations of investors or security analysts or any guidance we may provide, and which may cause the price of our Class A common stock to fluctuate or decline substantially.

Our quarterly and annual operating results may fluctuate significantly, which makes it difficult for us to predict our future operating results. These fluctuations may occur due to a variety of factors, many of which are outside of our control, including, but not limited to:

- our ability to successfully commercialize the Proteograph Product Suite on our anticipated timeline;
- our ability to offer high-quality customer service:
- the timing and cost of, and level of investment in, research and development and commercialization activities relating to the Proteograph Product Suite, including our SP100 automation instrument, proprietary engineered nanoparticle (NP) technology and Proteograph Analysis Suite software, which may change from time to time;
- the level of demand for any products we are able to commercialize, particularly the Proteograph Product Suite, which may vary significantly from period to period;
- our ability to drive adoption of the Proteograph in our target markets and our ability to expand into any future target markets;
- our relationship with third-party distributorships, the quantity of our products they elect to hold in inventory, and their ability to promote and sell our products;
- the prices at which we will be able to sell the Proteograph Product Suite and related services;
- the volume and mix of our sales between the Proteograph Product Suite and associated consumables, or changes in the manufacturing or sales costs related to our products;
- the length of time and unpredictable nature of the sales cycle;
- the lead time needed to procure SP100 automation instruments from our third-party contract manufacturer;
- the success of our sales force, which if less than anticipated, could significantly impair our ability to generate revenue;
- the failure of customers to exercise Proteograph purchase options;
- the effective and efficient use of our financial and other resources, including the timing and amount of expenditures that we may incur to develop, commercialize or acquire additional products and technologies or for other purposes, such as the expansion of our facilities;
- changes in governmental funding of life sciences research and development or changes that impact budgets and budget cycles;
- seasonal spending patterns and the ability to collect on the accounts receivable of our customers;
- the timing of when we recognize revenue;
- future accounting pronouncements, changes in accounting rules and regulations, or modifications to our accounting policies;
- the outcome of any future litigation or governmental investigations involving us, our industry or both;
- higher than anticipated service, replacement and warranty costs;

- the impact of health epidemics on the economy, investment in life sciences and research industries, our business operations, and resources and operations of our customers, suppliers, and distributors;
- global supply chain interruptions; and
- general industry, economic and market conditions such as inflation, rising interest rates, bank failures and other factors, including factors unrelated to our operating performance or the operating performance of our competitors.

The cumulative effects of the factors discussed above could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance.

This variability and unpredictability could also result in our failing to meet expectations of industry or financial analysts, or investors, for any period. If we are unable to commercialize products or generate sufficient revenue, or if our operating results fall below the expectations of analysts or investors or below any guidance we may provide, or if the guidance we provide is below the expectations of analysts or investors, it could cause the market price of our Class A common stock to fluctuate or decline substantially.

The size of the markets for the Proteograph Product Suite may be smaller or different from estimated, and new market opportunities may not develop as quickly as we expect, or at all, limiting our ability to successfully sell our products.

The market for proteomics and genomics technologies and products is evolving, making it difficult to predict with any accuracy the size of the markets for our current and future products, including the Proteograph Product Suite. Our estimates of the total addressable market for our current and future products are based on a number of internal and third-party estimates and assumptions. In particular, our estimates are based on our expectations that researchers in the market for certain life sciences research tools and technologies will view our products as competitive alternatives to, or better options than, existing tools and technologies. We also expect researchers will recognize the ability of our products to complement, enhance and enable new applications of their current tools and technologies. We expect them to recognize the value proposition offered by our products, enough to purchase our products in addition to the tools and technologies they already own. Underlying each of these expectations are a number of estimates and assumptions that may be incorrect, including the assumptions that government or other sources of funding will continue to be available to life sciences researchers at times and in amounts necessary to allow them to purchase our products and that researchers have sufficient samples and an unmet need for performing proteomics studies at scale across thousands of samples. In addition, sales of new products into new market opportunities may take years to develop and mature and we cannot be certain that these market opportunities will develop as we expect. New life sciences technology may not be adopted until the consistency and accuracy of such technology, method or device has been proven. As a result, the sizes of the annual total addressable market for new markets and new products are even more difficult to predict. Our product is an innovative new product, and while we draw comparisons between the evolution and growth of the genomics and proteomics markets, the proteomics market may develop more slowly or differently. In addition, the Proteograph Product Suite may not impact the field of proteomics in the same manner or degree, or within the same time frame, that NGS technologies have impacted the field of genomics, or at all. While we believe our assumptions and the data underlying our estimates of the total addressable market for our products are reasonable, these assumptions and estimates may not be correct and the conditions supporting our assumptions or estimates, or those underlying the third-party data we have used, may change at any time, thereby reducing the accuracy of our estimates. As a result, our estimates of the total addressable market for our products may be incorrect.

The future growth of the market for our current and future products depends on many factors beyond our control, including recognition and acceptance of our products by the scientific community and the growth, prevalence and costs of competing products and solutions. Such recognition and acceptance may not occur in the near term, or at all. If the markets for our current and future products are smaller than estimated or do not develop as we expect, our growth may be limited and our business, financial condition and operational results of operations could be adversely affected.

We are in the early stages of commercialization, and we may not be able to commercialize the Proteograph Product Suite as planned.

We have only recently initiated the broad commercialization of the Proteograph Product Suite, and we may not be able to successfully execute on this phase as planned due to:

- the inability to establish the capabilities and value proposition of the Proteograph Product Suite with key opinion leaders and other customers in a timely fashion;
- delays or longer-than expected lead times in the sales cycle to establish customer contacts, complete responsive presentations including platform evaluations tailored to specific requests, and move expeditiously from quote to order to revenue to receipt of payment due to budgetary or other constraints of academic organizations, laboratories, biopharmaceutical companies and others;
- changing industry or market conditions, customer requirements or competitor offerings during broad commercialization;
- delays in continuing the build-out of our sales, customer support and marketing organization as needed for broad commercialization;
- delays in ramping up manufacturing, either internally or through our suppliers, to meet the expected demand for broad commercialization; and
- the impact of health epidemics on the economy and research industries, our business operations, and resources and the operations of our customers, suppliers and supply chain, and distributors.

To the extent our broad commercial release phase is unsuccessful, our financial results will be adversely impacted.

Even if we are able to execute on our commercialization plan, our success depends on broad scientific and market acceptance of the Proteograph Product Suite, which we may fail to achieve.

Our ability to achieve and maintain scientific and commercial market acceptance of the Proteograph Product Suite will depend on a number of factors. We expect that the Proteograph will be subject to the market forces and adoption curves common to other new technologies. The market for proteomics and genomics technologies and products is in its early stages of development. If widespread adoption of the Proteograph takes longer than anticipated, or broad scientific and market acceptance does not occur, we will continue to experience operating losses.

The success of life sciences products is due, in large part, to acceptance by the scientific community and their adoption of certain products in the applicable field of research. The life sciences scientific community is often led by a small number of early adopters and key opinion leaders who significantly influence the rest of the community through publications, including peer-reviewed journals. In such journal publications, the researchers will describe not only their discoveries, but also the methods, and typically the products used, to fuel such discoveries. Mentions in publications, including peer-reviewed journal publications, are a driver for the general acceptance of life sciences products, such as the Proteograph Product Suite. We have and continue to collaborate with a small number of key opinion leaders who are highly skilled at evaluating novel technologies and whose feedback helped us solidify our commercialization plans and processes. Ensuring that early adopters and key opinion leaders publish research involving the use of our products is critical to ensuring our products gain widespread scientific acceptance. In addition, continuing collaborative relationships with key opinion leaders is vital to maintaining any market acceptance we achieve. If too few researchers describe the use of our products, too many researchers utilize or shift to a competing product and publish research outlining their use of that product or too many researchers negatively describe the use of our products in publications, it may drive customers away from our products and it may delay market acceptance and adoption of the Proteograph during broad commercialization.

Other factors in achieving commercial market acceptance, include:

- our ability to market and increase awareness of the capabilities of the Proteograph Product Suite;
- the ability of the Proteograph Product Suite to perform intended use applications broadly in the hands of customers;
- our customers' willingness to adopt new products and workflows;
- the Proteograph's ease of use and whether it reliably provides advantages over other alternative technologies;
- the rate of adoption of the Proteograph Product Suite by academic institutions, laboratories, biopharmaceutical companies and others;
- the prices we charge for the Proteograph Product Suite;
- our ability to develop new products, services and solutions that achieve commercial market acceptance;
- if competitors develop and commercialize products that perform similar functions as the Proteograph; and
- the impact of our investments in product innovation and commercial growth.

We cannot assure you that we will be successful in addressing each of these criteria or other criteria that might affect the market acceptance of any products we commercialize, particularly the Proteograph Product Suite. If we are unsuccessful in achieving and maintaining market acceptance of the Proteograph, our business, financial condition and results of operations would be adversely affected.

If our sales force is less successful than anticipated, we may not be successful in commercializing the Proteograph Product Suite.

We have limited experience as a company in sales and marketing and our ability to successfully commercialize depends on our being able to attract customers for the Proteograph Product Suite. Although members of our management team have considerable industry experience, we need to expand our sales, marketing, distribution and customer service and support capabilities with the appropriate technical expertise during the commercialization of the Proteograph Product Suite. To perform sales, marketing, distribution, and customer service and support successfully, we will face a number of risks, including:

- our ability to attract, retain and manage the sales, marketing and customer service and support force necessary to commercialize and gain market acceptance for our technology;
- the time and cost of establishing a specialized sales, marketing and customer service and support force; and
- our sales, marketing and customer service and support force may be unable to initiate and execute successful commercialization activities.

We have enlisted and may seek to enlist additional third parties to assist with sales, distribution and customer service and support globally or in certain regions of the world. There is no guarantee that we have attracted or will be successful in attracting desirable or experienced sales or distribution partners or that we have entered or will be able to enter into such arrangements on favorable terms. In addition, we rely on commercial carriers to transport our products, including consumables that are temperature controlled, to customers in a timely and cost-efficient manner, and if these services are delayed or disrupted, our business may be harmed. If our sales and marketing efforts, and logistics capability, or those of any third-party sales and distribution partners, are not successful, the Proteograph may not gain market acceptance, which could materially impact our business operations.

Even if the Proteograph Product Suite is successfully commercialized and achieves broad scientific and market acceptance, if we fail to improve it or introduce compelling new products and services, our revenues and our prospects could be harmed.

Even if we are able to broadly commercialize the Proteograph Product Suite and achieve broad scientific and market acceptance, our ability to attract new customers and increase revenue from existing customers will depend in large part on our ability to enhance and improve the Proteograph solution and to introduce compelling new products and services. The success of any enhancement to the Proteograph Product Suite or introduction of new products depends on several factors, including timely completion and delivery, competitive pricing, adequate quality testing, integration with existing technologies, appropriately timed and staged introduction and overall market acceptance. Any new product or enhancement to the Proteograph that we develop may not be introduced in a timely or cost-effective manner, may contain defects, errors, vulnerabilities or bugs, or may not achieve the market acceptance necessary to generate significant revenue.

The typical development cycle of new life sciences products can be lengthy and complicated, and may require new scientific discoveries or advancements, considerable resources and complex technology and engineering. Such developments may involve external suppliers and service providers, making the management of development projects complex and subject to risks and uncertainties regarding timing, timely delivery of required components or services and satisfactory technical performance of such components or assembled products. If we do not achieve the required technical specifications or successfully manage new product development processes, or if development work is not performed according to schedule, then such new technologies or products may be adversely impacted. If we are unable to successfully develop new products and services, enhance the Proteograph Product Suite to meet customer requirements, compete with alternative products, or otherwise gain and maintain market acceptance, our business, results of operations and financial condition could be harmed.

Health epidemics such as the COVID-19 pandemic could continue to adversely impact our business and operations.

Our ability to drive the adoption of the Proteograph Product Suite, including our instruments and associated consumables by academic, research, and commercial customers, depends on our ability to visit customer sites, the ability of our customers to access laboratories, and the ability to install and train on the Proteograph Product Suite and conduct research in light of the COVID-19 pandemic or any other health epidemic. These considerations are impacted by factors beyond our control, such as:

- reductions in capacity or shutdowns of laboratories and other institutions as well as reduced or delayed spending on instruments and consumables as a result of shutdowns and delays;
- decreases in government funding of research and development; and
- changes to programs that provide funding to research laboratories and institutions, including changes in the amount of funds allocated to different areas of research, changes that have the effect of increasing the length of the funding process or the impact of the COVID-19 pandemic on our customers and potential customers and their funding sources.

The future impact of the COVID-19 pandemic and any other health epidemic is highly uncertain and subject to sudden change. This impact could have a material, adverse impact on our liquidity, capital resources, operations and business and those of the third parties on which we rely, such as the manufacturer of our SP100 automation instrument, Hamilton Company, and could worsen over time. On May 11, 2023, the Biden administration ended the COVID-19 national and public health emergencies. The full impact of the termination of the public health emergencies on FDA and other regulatory policies and operations is unclear. Any of these occurrences, and any new epidemics, could significantly harm our business, results of operations and financial condition.

Unfavorable U.S. or global economic conditions could adversely affect our ability to raise capital and our business, results of operations and financial condition.

There has recently been extreme volatility and disruptions in the capital and credit markets, reducing our ability to raise additional capital through equity, equity-linked or debt financings, which could negatively impact our short-term and long-term liquidity and our ability to operate in accordance with our operating plan, or at all. Additionally, our results of operations could be adversely affected by general conditions in the global economy and financial markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including weakened demand for the Proteograph Product Suite and our ability to raise additional capital when needed on favorable terms, if at all. A weak or declining economy, rising inflation, rising interest rates, or bank failures could strain our customers' budgets or cause delays in their payments to us. Any of the foregoing could harm our business, and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our ability to raise capital, business, results of operations, financial condition, and cause the stock price of our Class A Common Stock to decline.

Adverse developments affecting the financial services industry could impair our ability to access our cash, cash equivalents and investments and to timely meet our financial obligations to our vendors and others.

Adverse developments affecting the financial services industry, many of which may be beyond our control, could impair our ability to access our cash, cash equivalents and investments and to timely meet our financial obligations to our vendors and others. If banks and financial institutions with whom we have relationships experience liquidity issues, become insolvent, or enter receivership, we may be unable to access, and we may lose, some of or all our cash, cash equivalents and investments to the extent those funds are not protected by FDIC or SIPC insurance. We regularly maintain cash, cash equivalents and investments that exceed insurance limits or are not insured, and the factors above or other related or similar factors not described above could have a material adverse effect on our financial statements and our vendor and other relationships, and cause the price of our Class A Common stock to decline.

If we do not sustain or successfully manage our growth or financial resources, our business and prospects will be harmed.

Growing our business will place significant strains on our management, operational and manufacturing systems and processes, sales and marketing team, financial resources, systems and internal controls, and other aspects of our business. Developing and commercializing the Proteograph Product Suite will require us to hire and retain scientific, sales and marketing, software, manufacturing, customer service, distribution, quality assurance and other personnel. In addition, we will need to hire additional accounting, finance and other personnel in connection with our efforts to comply with the requirements of being a public company. As a public company, our management and other personnel will need to devote a substantial amount of time towards maintaining compliance with these requirements and effectively manage these activities. We may face challenges integrating, developing and motivating our rapidly growing employee base. To effectively manage our growth, we must continue to improve our operational and manufacturing systems and processes, our financial systems and internal controls and other aspects of our business and continue to effectively expand, train and manage our personnel. As our organization continues to grow, we will be required to implement more complex organizational management structures, and may find it increasingly difficult to maintain the benefits of our corporate culture, including our ability to quickly develop and launch new and innovative products. If we do not successfully manage our growth or financial resources, our business, results of operations, financial condition and prospects will be harmed.

We depend on our key personnel and other highly qualified personnel, and if we are unable to recruit, train and retain our personnel, we may not achieve our goals.

Our future success depends upon our ability to recruit, train, retain and motivate key personnel. Our senior management team, including Omid Farokhzad, one of our founders and our Chief Executive Officer and President, and David Horn, our Chief Financial Officer, are critical to our vision, strategic direction, product development and commercialization efforts. The departure of one or more of our executive officers, senior management team

members, or other key employees could be disruptive to our business until we are able to hire qualified successors. We do not maintain “key man” life insurance on our senior management team.

Our continued growth and ability to successfully transition from a company primarily focused on development to commercialization depends, in part, on attracting, retaining and motivating qualified personnel, including highly-trained sales personnel with the necessary scientific background and ability to understand our systems at a technical level to effectively identify and sell to potential new customers. New hires require significant training and, in most cases, take significant time before they achieve full productivity. Our failure to successfully integrate these key personnel into our business could adversely affect our business. In addition, competition for qualified personnel is intense, particularly in the San Francisco Bay Area and San Diego. We compete for qualified scientific and information technology personnel with other life science and information technology companies as well as academic institutions and research institutions. Some of our scientific personnel are qualified foreign nationals whose ability to live and work in the United States is contingent upon the continued availability of appropriate visas. Due to the competition for qualified personnel in the San Francisco Bay Area and San Diego, we expect to continue to utilize foreign nationals to fill part of our recruiting needs. As a result, changes to United States immigration policies could restrain the flow of technical and professional talent into the United States and may inhibit our ability to hire qualified personnel.

In August 2023, we announced a reduction in force impacting approximately 12% of our full-time employees. In addition, we are taking measures to reduce our non-personnel expenses. These measures are part of our broader strategic effort to realign our expense base with our revenue growth as we continue to build the market and drive customer adoption of the Proteograph. The reduction in force and our other restructuring and cost-saving activities may yield unintended consequences and costs and we may not achieve the anticipated benefits of these measures. For example, the reduction in workforce could make it difficult for us to pursue, or prevent us from pursuing, new opportunities and initiatives due to insufficient personnel, or require us to incur additional and unanticipated costs to hire new personnel to pursue such opportunities or initiatives. We also may be required to take additional cost-saving measures in the future, including those involving personnel, and we may incur severance and other related costs. If we are unable to realize the anticipated benefits from the reduction in force and our other cost-saving measures, or if we experience significant adverse consequences from these measures, our business, financial condition, and results of operations may be materially adversely affected.

We do not maintain fixed term employment contracts with any of our employees. As a result, our employees could leave our company with little or no prior notice and could be free to work for a competitor. Due to the complex and technical nature of our products and technology and the dynamic market in which we compete, any failure to attract, train, retain and motivate qualified personnel could materially harm our business, results of operations, financial condition and prospects.

We expect to be dependent upon revenue generated from the sale of the Proteograph Product Suite for the foreseeable future.

We expect that we will generate substantially all of our revenue from the sale of the Proteograph Product Suite and associated consumables for the foreseeable future. There can be no assurance that we will be able to successfully broadly commercialize the Proteograph solution, design other products that will meet the expectations of our customers or that any of our future products will become commercially viable. As technologies change in the future for life sciences research tools, generally, and in proteomics and genomics technologies, specifically, we will be expected to upgrade or adapt the Proteograph solution to keep up with the latest technology. To date, we have limited experience simultaneously designing, testing, manufacturing and selling products and there can be no assurance we will be able to do so. Our sales expectations are based in part on the assumption that the Proteograph Product Suite will increase study sizes for our future customers and their associated purchases of our consumables. If sales of our instruments fail to materialize, or our assumptions about study sizes or customer purchases of our consumables, so will the related consumable sales and associated revenue.

In our development and commercialization plans for the Proteograph Product Suite, we may forego other opportunities that may provide greater revenue or be more profitable. If our research and product development efforts do not result in commercially viable products or services within anticipated timelines, or at all, our business

and results of operations will be adversely affected. Any delay or failure by us to develop and release the Proteograph Product Suite or new products or product enhancements would have a substantial adverse effect on our business and results of operations.

Our sales have been concentrated in a small number of customers.

We are in the early stages of our commercialization plan and our revenues have been concentrated in a relatively small number of customers, including a related party, PrognomiQ. For the nine months ended September 30, 2023, and 2022, PrognomiQ accounted for 33% and 32% of our revenue, respectively. If one or more customers, including PrognomiQ, terminate all or any portion of their agreements, delay installations or fail to order the anticipated amount of consumables or services, there could be a material adverse effect on our business, financial condition and results of operations. See Note 5 - *Revenue and Deferred Revenue* and Note 10 - *Related Party Transactions* to our notes to financial statements included in Part I, Item 1, herein for further information regarding our relationship with PrognomiQ.

Our business depends significantly on research and development spending by academic and other research institutions, and other third parties, including commercial organizations, and any reduction in spending could limit demand for our products and adversely affect our business, results of operations, financial condition and prospects.

Substantially all of our sales revenue in the near term will be generated from sales to commercial companies, academic institutions and other research institutions. Certain of these customers' funding is provided by various state, federal and international government agencies. As a result, the demand for the Proteograph Product Suite depends upon the research and development budgets of these customers, which are impacted by factors beyond our control, such as:

- decreases in government funding of research and development;
- changes to programs that provide funding to research laboratories and institutions, including changes in the amount of funds allocated to different areas of research or changes that have the effect of increasing the length of the funding process;
- changes in strategy and funding by commercial companies in their efforts around therapeutic and diagnostic product development and their adoption and use of the Proteograph Product Suite;
- macroeconomic conditions;
- opinions in the scientific community, including researchers' opinions of the utility of the Proteograph solution;
- citation of the Proteograph Product Suite in published research;
- potential changes in the regulatory environment;
- differences in budgetary cycles, especially government- or grant-funded customers, whose cycles often coincide with government fiscal year ends;
- competitor product or service offerings or pricing;
- market-driven pressures to consolidate operations and reduce costs; and
- market acceptance of relatively new technologies, such as the Proteograph Product Suite.

In addition, various state, federal and international agencies that provide grants and other funding may be subject to stringent budgetary constraints that could result in spending reductions, reduced grant making, reduced allocations or budget cutbacks, which could jeopardize the ability of these customers, or the customers to whom they provide funding, to purchase our products. For example, congressional appropriations to the National Institutes of Health (NIH) have generally increased year-over-year, the NIH also experiences occasional year-over-year decreases in

appropriations, including as recently as 2013. In addition, funding for life science research has increased more slowly during the past several years compared to previous years and has actually declined in some countries. There is no guarantee that NIH appropriations will not decrease in the future. A decrease in the amount of, or delay in the approval of, appropriations to NIH or other similar United States or international organizations, such as the Medical Research Council in the United Kingdom, could result in fewer grants benefiting life sciences research. These reductions or delays could also result in a decrease in the aggregate amount of grants awarded for life sciences research or the redirection of existing funding to other projects or priorities, any of which in turn could cause our customers and potential customers to reduce or delay purchases of our products. Our operating results may fluctuate substantially due to any such reductions and delays. Any decrease in our customers' budgets or expenditures, or in the size, scope or frequency of their capital or operating expenditures, could materially and adversely affect our business, results of operations, financial condition and prospects.

We rely on single suppliers for some of the components of the Proteograph Product Suite, including a single contract manufacturer to manufacture and supply our instruments. If these suppliers or manufacturers should fail or not perform satisfactorily, our ability to meet demand and supply the Proteograph Product Suite would be adversely affected.

We rely on a single contract manufacturer, Hamilton Company, a manufacturer of precision measurement devices, automated liquid handling workstations, and sample management systems located in Nevada and other locations, to manufacture and supply our instruments. Since our contract with Hamilton does not commit them to carry inventory or make available any particular quantities, Hamilton may give other customers' needs higher priority than ours, we may not be able to obtain adequate supplies in a timely manner or on commercially reasonable terms, and we may incur price increases from Hamilton Company. Further, if Hamilton is unable to obtain critical components used in the Proteograph solution or supply our instruments on the timelines we require, our business and commercialization efforts would be harmed.

In the event it becomes necessary to utilize one or more different contract manufacturers for automated liquid handling workstations, reagents or other product components associated with the Proteograph Product Suite, we would experience additional costs, delays and difficulties in doing so as a result of identifying and entering into new agreements with new suppliers or manufacturers. In addition, we would have to prepare such new suppliers or manufacturers to meet the logistical requirements associated with supplying and manufacturing the Proteograph Product Suite, and our business would suffer.

In addition, certain components used in our products are sourced from limited or sole suppliers. If we were to lose such suppliers, there can be no assurance that we will be able to identify or enter into agreements with alternative suppliers on a timely basis on acceptable terms, if at all. An interruption in our ability to sell and deliver instruments to customers could occur if we encounter delays or difficulties in securing these components, or if the quality of the components supplied does not meet specifications, or if we cannot then obtain an acceptable substitute. Our suppliers have also been impacted by the COVID-19 pandemic, and we have also experienced supply delays for critical hardware, instrumentation, medical and testing supplies that we use for product development, and certain components of our consumable kits, as these other components and supplies are otherwise diverted to COVID-19-related testing and other uses. If any of these events occur, our business, results of operations, financial condition and prospects could be harmed.

We have limited experience producing and supplying our products, and we may be unable to consistently manufacture or source our SP100 automation instruments and consumables to the necessary specifications or in quantities necessary to meet demand on a timely basis and at acceptable performance and cost levels.

The Proteograph Product Suite is an integrated solution with many different components that work together. As such, a quality defect in a single component can compromise the performance of the entire solution. In order to successfully generate revenue from the Proteograph Product Suite, we need to supply our customers with products that meet their expectations for quality and functionality in accordance with established specifications on a timely basis. Our instruments are manufactured by Hamilton Company at their facility using complex processes, sophisticated equipment and strict adherence to specifications and quality systems procedures. Given the complexity

of this automation instrumentation, individual units may occasionally require additional installation and service time prior to becoming available for customer use.

We leverage well-established unit operations to formulate and manufacture our NPs at our facilities in Redwood City, California. We procure certain components of our consumables from third-party manufacturers, which includes the commonly available raw materials needed for manufacturing our proprietary engineered NPs. These manufacturing processes are complex. As we increase the commercial scale formulation and manufacturing of our NP panels, if we are not able to repeatably produce our NPs at commercial scale or source them from third-party suppliers, encounter unexpected difficulties in packaging our consumables, fail to comply with regulations relating to laboratory safety, the handling of human samples, the use and transportation of certain hazardous substances or chemicals, including in commercial products, or the collection, reuse, and recycling of waste from products we manufacture, our business will be adversely impacted.

As we continue to scale commercially and develop new products, and as our products incorporate increasingly sophisticated technology, it will be increasingly difficult to ensure our products are produced in the necessary quantities without sacrificing quality. There is no assurance that we or our third-party manufacturer will be able to continue to manufacture our SP100 automation instrument so that it consistently achieves the product specifications and produces results with acceptable quality. Our NPs and other consumables have a limited shelf life, after which their performance is not ensured. Shipment of consumables that effectively expire early or shipment of defective instruments or consumables to customers may result in recalls and warranty replacements, which would increase our costs, and depending upon current inventory levels and the availability and lead time for additional inventory, could lead to availability issues. Any future design issues, unforeseen manufacturing problems, such as contamination of or cyber attacks on our or our manufacturers' facilities, equipment malfunctions, aging components, quality issues with components and materials sourced from third-party suppliers, or failures to strictly follow procedures or meet specifications, may have a material adverse effect on our brand, business, results of operations and financial condition and could result in us or our third-party manufacturers losing International Organization for Standardization (ISO) quality management certifications. If we or our third-party manufacturers fail to obtain or maintain applicable ISO quality management certifications, customers might choose not to purchase products from us.

In addition, as we commercialize the Proteograph Product Suite, we will also need to make corresponding improvements to other operational functions, such as our customer support, service and billing systems, compliance programs and our internal quality assurance programs. We cannot assure you that any increases in scale, related improvements and quality assurance will be successfully implemented or that appropriate personnel will be available. As we develop additional products, we may need to bring new equipment online, implement new systems, technology, controls and procedures and hire personnel with different qualifications.

An inability to manufacture products and components that consistently meet specifications, in necessary quantities, at commercially acceptable costs and without significant delays, may have a material adverse effect on our business, results of operations, financial condition and prospects.

Our products could have defects or errors, which may give rise to claims against us, adversely affect market adoption of the Proteograph Product Suite, damage our reputation, and adversely affect our business, financial condition, and results of operations.

The Proteograph Product Suite utilizes novel and complex technology, including hardware, consumables and software, and may develop or contain defects or errors. We cannot assure you that material performance problems, defects, or errors will not arise, and as we commercialize the Proteograph, these risks may increase. We provide warranties that our products will meet performance expectations and will be free from material defects. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins.

In manufacturing the Proteograph Product Suite, we depend upon third parties for the supply of our instruments and various components, many of which require a significant degree of technical expertise to produce. If our suppliers fail to produce our SP100 automation instrument and components to specification or provide defective products to us and our quality control tests and procedures fail to detect such errors or defects, or if we or our suppliers use

defective materials or workmanship in the manufacturing process, the reliability and performance of our products will be compromised.

If the Proteograph Product Suite contains defects, we may experience:

- a failure to achieve market acceptance for the Proteograph or expansion of the Proteograph Product Suite sales;
- loss of customer orders and delay in order fulfillment;
- damage to our brand reputation;
- increased warranty and customer service and support costs due to product repair or replacement;
- product recalls or replacements;
- inability to attract new customers;
- diversion of resources from our manufacturing and research and development departments to our service department; and
- legal claims against us, including product liability, hazardous material or environmental compliance claims, which could be costly and time consuming to defend and result in substantial damages.

In addition, we expect that the Proteograph Product Suite will be used with our potential customers' own mass spectrometry (MS) instruments or the MS instrument of a third-party service provider, and the performance of these MS instruments is outside of our control. If such third-party products are not produced to specification, are produced in accordance with modified specifications, are defective, or are not used with recommended equipment, they may not be compatible or perform as intended with the Proteograph. In such case, the reliability, results and performance of the Proteograph may be compromised. The occurrence of any one or more of the foregoing may have a material adverse effect on our business, results of operations, financial condition and prospects.

We face potential risks related to the use, handling, storage and transportation of biological samples, hazardous materials and substances or chemicals such as reagents in commercial products; the collection, reuse and recycling of waste from products we manufacture and services we provide; and compliance with environmental health and safety regulations.

At our facilities in Redwood City, including our Biohazards Safety Level 2 laboratory, we leverage unit operations to formulate and manufacture our NPs, assemble our consumables, conduct assays and perform mass spectrometer analyses. As we increase the commercial scale, formulation and manufacture of our products using, handling, storing and transporting biological samples, hazardous materials and substances or chemicals such as reagents, or if we are unable to repeatably produce our products or perform our services, in compliance with applicable healthy and safety, and environmental laws, rules and regulations, our operations, including our sales, could be negatively affected. In addition, if we encounter issues in packaging and labelling our consumables, complying with regulations relating to laboratory safety, safety data sheets, handling human samples such as inactive COVID-19 samples, using certain hazardous substances or chemicals such as reagents in commercial products, collecting, reusing and recycling of waste from products we manufacture, or complying with environmental health and safety regulations, our business could be adversely impacted.

If we do not successfully deploy and implement enhancements of the Instrument Control Software and Proteograph Analysis Suite, our commercialization efforts and, therefore, business and results of operations could suffer.

The success of the Proteograph Product Suite depends, in part, on our ability to design and deploy our Instrument Control Software and Proteograph Analysis Suite in a manner that enables the integration with our potential customers' systems and accommodates our customers' needs. Without the Instrument Control Software, the Proteograph may become inoperable. Without the Proteograph Analysis Suite software, quality control of the

workflow and data analysis is less accessible and robust, and it may be difficult for our customers to understand and evaluate the quality of their results.

We have and will continue to spend significant amounts of effort continuing to develop our software to meet our customers' and potential customers' evolving needs. There is no assurance that the development or deployment of our software will be compelling to our customers or function correctly. In addition, we may experience delays in our release dates of our software, and there can be no assurance that our software will be released according to schedule. If our software development and deployment plan, which may include participation from third party vendors and licensors, does not accurately anticipate customer demands, or if we fail to develop our software in a manner that satisfies customer preferences in a timely and cost-effective manner, the Proteograph Product Suite may fail to gain market acceptance or function correctly. The occurrence of any one or more of the foregoing could negatively affect our business, financial condition, and results of operations.

As we commercialize the Proteograph Product Suite outside of the United States, our international business could expose us to business, regulatory, legal, political, operational, financial, and economic risks associated with doing business outside of the United States.

Engaging in international business inherently involves a number of difficulties and risks, including:

- required compliance with existing and changing foreign regulatory requirements and laws that are or may be applicable to our business in the future, such as the European Union's General Data Protection Regulation (GDPR) and other data privacy requirements, labor and employment regulations, anti-competition regulations, the U.K. Bribery Act of 2010 and other anti-corruption laws, regulations relating to the use of certain hazardous substances or chemicals in commercial products, and to the collection, reuse, and recycling of waste from products we manufacture;
- required compliance with U.S. laws such as the Foreign Corrupt Practices Act, and other U.S. federal laws and regulations, including with respect to not doing business with sanctioned parties, as prohibited by the office of Foreign Asset Control;
- export requirements and import or trade restrictions, including, without limitation, trade retaliation laws;
- laws and business practices favoring local companies;
- risks associated with transactions or payments denominated in foreign currency, longer payment cycles and difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;
- changes in social, economic, political and climate conditions or in laws, regulations and policies governing foreign trade, manufacturing, research and development, investment, and climate control both domestically as well as in the other countries and jurisdictions in which we operate and into which we may sell our products, including as a result of the separation of the United Kingdom from the European Union (Brexit);
- potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements, and other trade barriers;
- difficulties and costs of staffing and managing foreign operations; and
- difficulties protecting, maintaining, enforcing or procuring intellectual property rights.

The collection and transfer of personal data and human samples is subject to increasing regulatory authority around the world. For example, Europe and China have adopted or are in the process of adopting data protections laws, regulations, and practice standards covering personal data, medical samples and data, and their potential transfer across national borders. In some cases, consent from individuals and the opportunity for revocation of consent, handling by local entities, and approvals from regulatory bodies may be required, and enforcement may include suspension of the ability to conduct business in the regulated jurisdiction along with civil fines and criminal penalties. This could increase our compliance costs and subject us to significant risks of doing business in these

jurisdictions, and any failure to comply with these laws, rules, and regulations could materially and adversely affect our revenue and business operations.

If one or more of these risks occurs, it could require us to dedicate significant resources to remedy such occurrence, and if we are unsuccessful in finding a solution, our financial results will suffer.

A portion of our international sales is and will be conducted through third-party distributors, and we will not control their efforts to sell our products. If our relationships with these third-party distributors cannot be established or deteriorate, or if these third-party distributors fail to sell our products, or engage in activities that harm our reputation, our results of operation and business may be negatively affected.

Our current commercial model includes direct sales in the United States and elsewhere, and we have built and are building relationships with third party distributors in various countries to enable us to enter additional markets more efficiently. If we are unable to enter or maintain such distribution arrangements on acceptable terms, or at all, we may not be able to successfully commercialize our products in certain countries.

Furthermore, distributors can choose the level of effort that they apply to selling our products relative to others in their portfolio. Our distributors may not commit the necessary resources to market our products or may favor the products of other companies. The selection, training, and compensation of distributors' sales personnel are within their control rather than our own and may vary significantly in quality from distributor to distributor. They may experience their own financial difficulties, or distribution relationships may be terminated or allowed to expire, which could increase the cost of or impede commercialization of our products in applicable countries. Disputes may also arise between us and our distributors that result in the delay or termination of commercialization or that result in costly litigation or arbitration that diverts management's attention and resources. Distributors may not properly maintain or defend our intellectual property rights or may use our intellectual property, and our confidential or proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property rights, and confidential or proprietary information, and expose us to potential litigation. Distributors could move forward with competing products developed either independently or in collaboration with others, including our competitors.

In addition, although we intend to require contract terms obligating our distributors to comply with all applicable laws regarding the sale of our products, including regulatory labelling, protection of personal data, U.S. export regulations and the U.S. Foreign Corrupt Practices Act (FCPA), we may not be able to ensure proper compliance. If our distributors fail to effectively market and sell our products in full compliance with applicable laws and regulations, our results of operations and business may suffer.

The life sciences technology market is highly competitive. If we fail to compete effectively, our business and results of operation will suffer.

We face significant competition in the life sciences technology market. We currently compete with life sciences technology and the diagnostic companies that are supplying components, products and services that serve customers engaged in proteomics analysis. These companies include Agilent Technologies, Bruker Corporation, Danaher, DiaSorin, and Thermo Fisher Scientific. We also compete with a number of companies that have developed, or are developing, proteomic products and solutions, such as Nautilus Biotechnology, Olink Proteomics, Quanterix, Quantum-Si and SomaLogic.

Some of our current competitors are large publicly-traded companies, or are divisions of large publicly-traded companies, and may enjoy a number of competitive advantages over us, including:

- greater name and brand recognition;
- greater financial and human resources;
- broader product lines;
- larger sales forces and more established distributor networks;

- substantial intellectual property portfolios;
- larger and more established customer bases and relationships; and
- better established, larger scale and lower cost manufacturing capabilities.

We also face competition from researchers developing their own products. The area in which we compete involves rapid innovation and some of our customers have in the past, and more may in the future, elect to create their own assays rather than rely on a third-party supplier such as ourselves. This is particularly true for the largest research centers and laboratories who are continually testing and trying new technologies, whether from a third-party vendor or developed internally. We will also compete for the resources our customers allocate for purchasing a wide range of products used to analyze the proteome, some of which may be additive to or complementary with our own but not directly competitive.

We cannot assure investors that our products will compete favorably or that we will be successful in the face of increasing competition from products and technologies introduced by our existing or future competitors, companies entering our markets or developed by our customers internally. In addition, we cannot assure investors that our competitors do not have or will not develop products or technologies that currently or in the future will enable them to produce competitive products with greater capabilities or at lower costs than ours or that are able to run comparable experiments at a lower total experiment cost. Any failure to compete effectively could materially and adversely affect our business, financial condition and operating results.

We may need to raise additional capital to fund commercialization plans for the Proteograph Product Suite, including manufacturing, sales and marketing activities, expand our investments in research, and develop and commercialize new products and applications.

Based on our current plans, we believe that our current cash, cash equivalents and investments will be sufficient to meet our anticipated cash flow requirements for at least twelve months from the date of this Quarterly Report. If our available cash resources and anticipated cash flow from operations are insufficient to satisfy our liquidity requirements including because of lower demand for our products or the realization of other risks described in this Quarterly Report, we may be required to raise additional capital prior to such time through issuances of equity or convertible debt securities, entrance into a credit facility or another form of third-party funding or seek other debt financing.

We will consider raising additional capital in the future to expand our business, to pursue strategic investments, to take advantage of financing opportunities or for other reasons, including:

- increasing our sales and marketing and other commercialization efforts to drive market adoption of the Proteograph Product Suite;
- funding development and marketing efforts of the Proteograph Product Suite or any other future products;
- expanding our technologies into additional markets;
- acquiring, licensing or investing in technologies and other intellectual property rights;
- acquiring or investing in complementary businesses or assets; and
- financing capital expenditures and general and administrative expenses.

Our present and future funding requirements will depend on many factors, including:

- our rate of progress in commercializing the Proteograph Product Suite and new products, and the cost of the sales and marketing activities associated with establishing adoption of our products;
- our rate of progress in, and cost of research and development activities associated with, products in research and development; and

- the effect of competing technological and market developments.

The various ways we could raise additional capital carry potential risks. If we raise funds by issuing equity securities, dilution to our stockholders could result. If we raise funds by issuing debt securities, those debt securities would have rights, preferences and privileges senior to those of holders of our Class A common stock. The terms of debt securities issued or borrowings pursuant to a credit agreement could impose significant restrictions on our operations. If we borrow funds from or deposit funds in banks or other financial institutions, we might encounter increasingly restrictive requirements and be subject to their solvency risk. If we raise funds through collaborations or licensing arrangements, we might be required to relinquish significant rights to our technologies or products or grant licenses on terms that are not favorable to us.

If we are unable to obtain adequate financing or financing on terms satisfactory to us, if we require it, our ability to continue to pursue our business objectives and to respond to business opportunities, challenges, or unforeseen circumstances could be significantly limited, and could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may acquire other companies, or their assets or technologies, enter into joint ventures, or make other strategic investments in companies, which could divert our management's attention, result in additional dilution to our stockholders and otherwise disrupt our operations and harm our operating results.

We may in the future seek to acquire or invest in businesses, applications or technologies that we believe could complement or expand the Proteograph Product Suite or future products, enhance our technical capabilities or otherwise offer growth opportunities. The pursuit of potential acquisitions may divert the attention of management and cause us to incur various costs and expenses in identifying, investigating and pursuing suitable acquisitions, whether or not they are consummated. We may not be able to identify desirable acquisition targets or be successful in entering into an agreement with any particular target or obtain the expected benefits of any acquisition or investment.

To date, the growth of our operations has been organic, and we have limited experience in acquiring or investing in other businesses or technologies. We may not be able to successfully integrate acquired personnel, operations and technologies, or effectively manage the combined business following an acquisition. Acquisitions could also result in dilutive issuances of equity securities, the use of our available cash, or the incurrence of debt, which could harm our operating results. In addition, if an acquired business fails to meet our expectations, our operating results, business and financial condition may suffer.

We may not realize the benefits of PrognomiQ as a separate healthcare company in the area of disease testing.

In August 2020, we transferred certain assets to PrognomiQ, as a separate healthcare company to help enable the growth of ecosystems around new applications that leverage the Proteograph solution for unbiased, deep and large-scale proteomic information. As of September 30, 2023, we held approximately 15% of the outstanding capital stock of PrognomiQ. We may not realize the potential benefits of forming PrognomiQ for a variety of reasons, including:

- PrognomiQ may be unable to successfully develop viable testing products;
- PrognomiQ's business may not help demonstrate the value of the Proteograph;
- an inability to reach agreement with PrognomiQ on future commercial arrangements;
- although PrognomiQ accounted for 34% and 33% of our revenue during the three and nine months ended September 30, 2023, respectively, it may not continue to be a meaningful customer of ours;
- PrognomiQ may need to raise additional funding in the future and be unable to do so; and
- the formation of PrognomiQ and our continuing equity position in PrognomiQ may add complexities to our business from a finance, tax and accounting perspective.

Further, PrognomiQ is a separate entity, and as such, may decide over time to pursue a different business model, decide to do business with our competitors in addition to or instead of with us, be acquired by a competitor or take other actions that may not be beneficial to us.

Risks Related to Financial Reporting

We are required by Section 404 of the Sarbanes-Oxley Act to evaluate the effectiveness of our internal control over financial reporting. If we are unable to achieve and maintain effective internal controls, our operating results and financial condition could be harmed and the market price of our Class A common stock may be negatively affected.

As a public company with SEC reporting obligations, we are required to document and test our internal control procedures to satisfy the requirements of Section 404(a) of the Sarbanes-Oxley Act (SOX), which requires annual assessments by management of the effectiveness of our internal control over financial reporting. Because we re-qualified as a smaller reporting company, as of December 31, 2022, we are a non-accelerated filer and are no longer required to comply with the auditor attestation requirements regarding the effectiveness of our internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act until we become an accelerated filer or large accelerated filer.

During our assessments, we may identify deficiencies that we are unable to remediate in a timely manner. Testing and maintaining our internal control over financial reporting may also divert management's attention from other matters that are important to the operation of our business. We may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404(a) of SOX. If we conclude that our internal control over financial reporting is not effective, the cost and scope of remediation actions and their effect on our operations may be significant. Moreover, any material weaknesses or other deficiencies in our internal control over financial reporting may impede our ability to file timely and accurate reports with the SEC, and there could be a failure to meet exchange listing requirements. Any of the above could cause investors to lose confidence in our reported financial information or our Class A common stock listing on Nasdaq to be suspended or terminated, which could have a negative effect on the trading price of our common stock.

If we fail to maintain an effective system of internal controls, or otherwise fail to comply with the Sarbanes-Oxley Act of 2002, we may not be able to accurately and timely report our financial results, which may adversely affect our business and investor confidence in us and, as a result, the value of our Class A common stock.

If we are unable to successfully maintain internal control over financial reporting, or identify any material weaknesses, the accuracy and timing of our financial reporting may be adversely affected. Any failure to implement and maintain effective internal control over financial reporting could cause investors to lose confidence in our reported financial and other information, adversely impact our stock price, cause us to incur increased costs to remediate any deficiencies, and attract regulatory scrutiny or lawsuits that could be costly to resolve and distract management's attention, limit our ability to access the capital markets or cause our stock to be delisted from The Nasdaq Global Select Market or any other securities exchange on which it is then listed. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results in a timely manner or prevent fraud, which would harm our business.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation, could cause us to fail to meet our reporting obligations in a timely manner, or at all. In addition, any testing by us conducted in connection with Section 404(a) of SOX or any subsequent testing by our independent registered public accounting firm in connection with Section 404(b) of SOX, may reveal deficiencies in our internal controls over financial reporting that are deemed to be significant deficiencies or material weaknesses or that may require prospective or retroactive changes to our condensed consolidated financial statements or identify other areas for further attention or improvement. We are also required to disclose material changes made in our internal controls over financing reporting and procedures

on a quarterly basis and our management is required to assess the effectiveness of these controls annually. Remediation of previous material weaknesses may not be effective or prevent any future deficiency in our internal control over financial reporting. Ineffective internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our Class A common stock.

To achieve compliance with Section 404(a) within the prescribed period, we have engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a plan to assess and document the adequacy of our internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are designed and operating effectively and implement a continuous reporting and improvement process for internal control over financial reporting.

An independent assessment of the effectiveness of our internal controls could detect problems that our management's assessment might not identify. Undetected material weaknesses in our internal controls could lead to financial statement restatements and require us to incur the expense of remediation.

Changes in, or evolving interpretations of, financial accounting rules, regulations, standards or practices could result in unfavorable accounting changes, require us to, for example, change our compensation policies or restate our financial statements, or cause adverse, unexpected fluctuations in our operating results, resulting in a decline in the market price of our Class A common stock.

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in our condensed consolidated financial statements and accompanying notes. We base our estimates on historical experience and estimates and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. However, we have a limited operating history. For example, in connection with the implementation of the new revenue accounting standard for product sales, management makes judgments and assumptions based on our interpretation of the new standard. The new revenue standard is principle-based and interpretation of those principles may vary from company to company based on their unique circumstances. It is possible that interpretation, industry practice and guidance may evolve as we apply the new standard. If our assumptions underlying our estimates and judgments relating to our critical accounting policies change or if actual circumstances differ from our assumptions, estimates or judgments, or if accounting rules, regulations, standards or practices change, our compensation practices may need to change or our financial statements may need to be restated, and our operating results may be adversely affected and could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our Class A common stock.

Risks Related to Regulatory Compliance

If we elect to label and promote any of our products as clinical diagnostics tests or medical devices, we would be required to obtain prior approval or clearance by the FDA, which would take significant time and expense and could fail to result in FDA clearance or approval for the intended uses we believe are commercially attractive.

Our products are currently labeled and promoted, and are, and in the near-future will be, sold as research use only (RUO) products, primarily to academic and research institutions and research companies, and are not currently designed, or intended to be used, for diagnostic procedures, clinical diagnostic tests or as medical devices. If we elect to label and market our products for use as, or in the performance of, clinical diagnostics in the United States, thereby subjecting them to U.S. Food and Drug Administration (FDA) regulation as medical devices, we would be required to obtain premarket 510(k) clearance or premarket approval from the FDA, unless an exception applies.

We may in the future register with the FDA as a medical device manufacturer and list some of our products with the FDA pursuant to an FDA Class I listing for general purpose laboratory equipment. While this regulatory

classification is exempt from certain FDA requirements, such as the need to submit a premarket notification commonly known as a 510(k), and some of the requirements of the FDA's Quality System Regulations (QSRs), we would be subject to ongoing FDA "general controls," which include compliance with FDA regulations for labeling, inspections by the FDA, complaint evaluation, corrections and removals reporting, promotional restrictions, reporting adverse events or malfunctions for our products, and general prohibitions against misbranding and adulteration.

In addition, we may in the future submit 510(k) premarket notifications to the FDA to obtain FDA clearance of certain of our products on a selective basis. It is possible, in the event we elect to submit 510(k) applications for certain of our products, that the FDA would take the position that a more burdensome premarket application, such as a premarket approval application (PMA) or a de novo application is required for some of our products. If such applications were required, greater time and investment would be required to obtain FDA approval. Even if the FDA agreed that a 510(k) was appropriate, FDA clearance can be expensive and time consuming. It generally takes a significant amount of time to prepare a 510(k), including conducting appropriate testing on our products, and several months to years for the FDA to review a submission. Notwithstanding the effort and expense, FDA clearance or approval could be denied for some or all of our products for which we choose to market as a medical device or a clinical diagnostic device. Even if we were to seek and obtain regulatory approval or clearance, it may not be for the intended uses we request or that we believe are important or commercially attractive. There can be no assurance that future products for which we may seek premarket clearance or approval will be approved or cleared by FDA or a comparable foreign regulatory authority on a timely basis, if at all, nor can there be assurance that labeling claims will be consistent with our anticipated claims or adequate to support continued adoption of such products. Compliance with FDA or comparable foreign regulatory authority regulations will require substantial costs, and subject us to heightened scrutiny by regulators and substantial penalties for failure to comply with such requirements or the inability to market our products. The lengthy and unpredictable premarket clearance or approval process, as well as the unpredictability of the results of any required clinical studies, may result in our failing to obtain regulatory clearance or approval to market such products, which would significantly harm our business, results of operations, reputation, and prospects.

If we sought and received regulatory clearance or approval for certain of our products, we would be subject to ongoing FDA obligations and continued regulatory oversight and review, including the general controls listed above and the FDA's QSRs for our development and manufacturing operations. In addition, we would be required to obtain a new 510(k) clearance before we could introduce subsequent modifications or improvements to such products. We could also be subject to additional FDA post-marketing obligations for such products, any or all of which would increase our costs and divert resources away from other projects. If we sought and received regulatory clearance or approval and are not able to maintain regulatory compliance with applicable laws, we could be prohibited from marketing our products for use as, or in the performance of, clinical diagnostics and/or could be subject to enforcement actions, including warning letters and adverse publicity, fines, injunctions, and civil penalties; recall or seizure of products; operating restrictions; and criminal prosecution.

In addition, we could decide to seek regulatory clearance or approval for certain of our products in countries outside of the United States. Sales of such products outside the United States will likely be subject to foreign regulatory requirements, which can vary greatly from country to country. As a result, the time required to obtain clearances or approvals outside the United States may differ from that required to obtain FDA clearance or approval and we may not be able to obtain foreign regulatory approvals on a timely basis or at all. In Europe, we would need to comply with the new Medical Device Regulation 2017/745 and In Vitro Diagnostic Regulation 2017/746, which became effective on May 26, 2021 (postponed from 2020) and May 26, 2022 respectively. Recently, the European Parliament voted to extend the transition timelines for MDR and IVDR. These regulations increase the clinical requirements and will increase the difficulty of regulatory approvals in Europe. In addition, the FDA regulates exports of medical devices. Failure to comply with these regulatory requirements or obtain and maintain required approvals, clearances and certifications could impair our ability to commercialize our products for diagnostic use outside of the United States.

Our products could become subject to government regulation as medical devices by the FDA and other regulatory agencies even if we do not elect to seek regulatory clearance or approval to market our products for diagnostic purposes, which would adversely impact our ability to market and sell our products and harm our business. If our products become subject to FDA regulation, the regulatory clearance or approval and the maintenance of continued and post-market regulatory compliance for such products will be expensive, time-consuming, and uncertain both in timing and in outcome.

We do not currently expect the Proteograph Product Suite to be subject to the clearance or approval of the FDA, as it is not intended to be used for the diagnosis, treatment or prevention of disease. However, as we expand our product line and the applications and uses of our current or products into new fields, certain of our future products could become subject to regulation by the FDA, or comparable international agencies, including requirements for regulatory clearance or approval of such products before they can be marketed. Also, even as our products are labeled, promoted, and intended as RUO, the FDA or comparable agencies of other countries could disagree with our conclusion that our products are intended for research use only or deem our sales, marketing and promotional efforts as being inconsistent with RUO products. For example, our customers may independently elect to use our RUO labeled products in their own laboratory developed tests (LDTs) for clinical diagnostic use, which could subject our products to government regulation, and the regulatory clearance or approval and maintenance process for such products may be uncertain, expensive, and time-consuming. Regulatory requirements related to marketing, selling, and distribution of RUO products could change or be uncertain, even if clinical uses of our RUO products by our customers were done without our consent. If the FDA or other regulatory authorities assert that any of our RUO products are subject to regulatory clearance or approval, our business, financial condition, or results of operations could be adversely affected.

As manufacturers develop more complex diagnostic tests and diagnostic software, the FDA may increase its regulation of LDTs. Any future legislative or administrative rule making or oversight of LDTs, if and when finalized, may impact the sales of our products and how customers use our products, and may require us to change our business model in order to maintain compliance with these laws. We cannot predict how these various efforts will be resolved, how Congress or the FDA will regulate LDTs in the future, or how that regulatory system will impact our business. Changes to the current regulatory framework, including the imposition of additional or new regulations, including regulation of our products, could arise at any time during the development or marketing of our products, which may negatively affect our ability to obtain or maintain FDA or comparable regulatory approval of our products, if required. Further, sales of devices for diagnostic purposes may subject us to additional healthcare regulation and enforcement by the applicable government agencies. Such laws include, without limitation, state and federal anti-kickback or anti-referral laws, healthcare fraud and abuse laws, false claims laws, privacy and security laws, Physician Payments Sunshine Act and related transparency and manufacturer reporting laws, and other laws and regulations applicable to medical device manufacturers.

Additionally, on November 25, 2013, the FDA issued Final Guidance “Distribution of In Vitro Diagnostic Products Labeled for Research Use Only.” The guidance emphasizes that the FDA will review the totality of the circumstances when it comes to evaluating whether equipment and testing components are properly labeled as RUO. The final guidance states that merely including a labeling statement that the product is for research purposes only will not necessarily render the device exempt from the FDA’s clearance, approval, and other regulatory requirements if the circumstances surrounding the distribution, marketing and promotional practices indicate that the manufacturer knows its products are, or intends for its products to be, used for clinical diagnostic purposes. These circumstances may include written or verbal sales and marketing claims or links to articles regarding a product’s performance in clinical applications and a manufacturer’s provision of technical support for clinical applications.

In August 2020, the Department of Health and Human Services, or HHS, announced rescission of guidances and other informal issuances of FDA regarding premarket review of LDT absent notice-and-comment rulemaking, stating that, absent notice-and-comment rulemaking, those seeking approval or clearance of, or an emergency use authorization, for an LDT may nonetheless voluntarily submit a premarket approval application, premarket notification or an EUA request, respectively, but are not required to do so. In November 2021, HHS under the Biden administration issued a statement that withdrew the August 2020 policy announcement, stating that HHS does not have a policy on LDTs that is separate from FDA's longstanding approach. Legislative and administrative proposals to amend the FDA's oversight of LDTs have been introduced in recent years, including the Verifying Accurate

Leading-edge IVCT Development Act of 2021 (VALID Act). In September 2022, Congress passed the FDA user fee reauthorization legislation without substantive FDA policy riders, including the VALID Act, but Congress may revisit the policy riders and enact other FDA programmatic reforms in the future. It is unclear how future legislation by federal and state governments and FDA regulation will impact the industry, including our business and that of our customers.

Risks Related to our Intellectual Property

If we are unable to obtain, maintain and enforce sufficient intellectual property protection for our products and technology, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products may be impaired.

We rely on patent protection as well as trademark, copyright, trade secret and other intellectual property rights protection and contractual restrictions to protect our proprietary products and technologies, all of which provide limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. If we fail to obtain, maintain, enforce and protect our intellectual property, third parties may be able to compete more effectively against us. In addition, we may incur substantial litigation costs in our attempts to recover or restrict use of our intellectual property.

To the extent our intellectual property offers inadequate protection, or is found to be invalid or unenforceable, we would be exposed to a greater risk of direct competition. If our intellectual property does not provide adequate coverage of our competitors' products, our competitive position could be adversely affected, as could our business, financial condition, results of operations and prospects. Both the patent application process and the process of managing patent and other intellectual property disputes can be time-consuming, expensive and unpredictable.

Our success depends in large part on our and our licensor's ability to obtain and maintain protection of the intellectual property we may own solely and jointly with, or license from, third parties, particularly patents, in the United States and other countries with respect to our products and technologies. We apply for patents covering our products and technologies and uses thereof, as we deem appropriate. However, obtaining and enforcing patents is costly, time-consuming and complex, and we may fail to apply for patents on important products and technologies in a timely fashion or at all, or we may fail to apply for patents in potentially relevant jurisdictions. We may not be able to file and prosecute all necessary or desirable patent applications, or maintain, enforce and license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner or in all jurisdictions. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, we may not develop additional proprietary products, methods and technologies that are patentable. We may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed from or to third parties. Therefore, these patents and applications may not be prosecuted and enforced by such third parties in a manner consistent with the best interests of our business.

In addition, the patent position of life sciences technology companies generally is highly uncertain, involves complex legal and factual questions, and has been the subject of much litigation in recent years. Changes in either the patent laws or in interpretations of patent laws in the United States or other countries or regions may diminish the value of our intellectual property. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. It is possible that none of our pending patent applications will result in issued patents in a timely fashion or at all, and even if patents are granted, they may not provide a basis for intellectual property protection of commercially viable products or services, may not provide us with any competitive advantages, or may be challenged, narrowed and invalidated by third parties. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. It is possible that third parties will design around our current or future patents such that we cannot prevent such third parties from using similar technologies and commercializing similar products to compete with us. Some of our owned or licensed patents or patent applications may be challenged at a future point in time and we may not be successful in defending any such challenges made against our patents or patent applications. Any successful third-party challenge to our patents could result in the narrowing, unenforceability or invalidity of such patents and increased competition to our

business. The outcome of patent litigation or other proceeding can be uncertain, and any attempt by us to enforce our patent rights against others or to challenge the patent rights of others may not be successful, or, regardless of success, may take substantial time and result in substantial cost, and may divert our efforts and attention from other aspects of our business. Any of the foregoing events could have a material adverse effect on our business, financial condition and results of operations.

The U.S. law relating to the patentability of certain inventions in the life sciences technology industry is uncertain and rapidly changing, which may adversely impact our existing patents or our ability to obtain patents in the future.

Changes in either the patent laws or interpretation of the patent laws in the United States or in other jurisdictions could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. For instance, under the Leahy-Smith America Invents Act, or the America Invents Act, enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application is entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. These changes include allowing third-party submission of prior art to the United States Patent and Trademark Office (USPTO) during patent prosecution and additional procedures to challenge the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, *inter partes* review and derivation proceedings. The America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and future patent applications, and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Various courts, including the U.S. Supreme Court, have rendered decisions that impact the scope of patentability of certain inventions or discoveries relating to the life sciences technology. Specifically, these decisions stand for the proposition that patent claims that recite laws of nature or abstract ideas are not themselves patentable unless those patent claims have sufficient additional features that provide practical assurance that the processes are genuine inventive applications of those laws rather than patent drafting efforts designed to monopolize the law of nature itself. What constitutes a “sufficient” additional feature is uncertain. Furthermore, in view of these decisions, since December 2014, the USPTO has published and continues to publish revised guidelines for patent examiners to apply when examining process claims for patent eligibility.

In addition, U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that may have a material adverse effect on our ability to obtain new patents and to defend and enforce our existing patents and patents that we might obtain in the future.

We cannot assure you that our patent portfolio will not be negatively impacted by the current uncertain state of the law, new court rulings or changes in guidance or procedures issued by the USPTO or other similar patent offices around the world. From time to time, the U.S. Supreme Court, other federal courts, the U.S. Congress or the USPTO may change the standards of patentability, scope and validity of patents within the life sciences technology and any such changes, or any similar adverse changes in the patent laws of other jurisdictions, could have a material and negative impact on our business, financial condition, prospects and results of operations.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on our technology and products, including the Proteograph Product Suite, in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States.

The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States, and we and our licensor may encounter difficulties in protecting and defending such rights in foreign jurisdictions. Obtaining granted patents in foreign jurisdictions is time-consuming and expensive, the outcome is

unpredictable, and some countries are unable to prosecute and grant patents in a timely manner. Consequently, we and our licensor(s) may not be able to prevent third parties from practicing our inventions in some or all countries outside the United States, or from selling or importing products made using our or our licensor's inventions in and into the United States or other jurisdictions. It is unknown whether we will be successful in obtaining patents with sufficient claim scope in certain jurisdictions to block third parties, in a cost effective or in a timely manner, and if we are unable to do so it could have a material adverse effect on our business, financial condition, results of operation and prospects in various geographies.

Moreover, European applications now have the option, upon grant of a patent, of becoming a Unitary Patent which will be subject to the jurisdiction of the Unitary Patent Court (UPC). This is a significant change in European patent practice. As the UPC is a new court system, there is no precedent for the court, increasing the uncertainty of any patent litigation in Europe.

Competitors and other third parties may also use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and technologies and may also export infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products. Our and our licensor's patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. In addition, certain countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to other parties. Furthermore, many countries limit the enforceability of patents against other parties, including government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of any patents.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of many other countries do not favor the enforcement of patents and other intellectual property protection, which could make it difficult for us to stop the misappropriation or other violations of our intellectual property rights including infringement of our patents in such countries. The legal systems in certain countries may also favor state-sponsored or companies headquartered in particular jurisdictions over our first-in-time patents and other intellectual property protection. Geopolitical actions worldwide could increase the uncertainties and costs surrounding the prosecution or maintenance of our patent applications or those of any current or future licensors and the maintenance, enforcement or defense of our issued patents or those of any current or future licensors. The absence of harmonized intellectual property protection laws and effective enforcement makes it difficult to ensure consistent respect for patent, trade secret, and other intellectual property rights on a worldwide basis. As a result, it is possible that we will not be able to enforce our rights against third parties that misappropriate our proprietary technology in those countries.

Proceedings to enforce our or our licensor's patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business, could put our and our licensor's patents at risk of being invalidated or interpreted narrowly and our and our licensor's patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We and our licensors may not prevail in any lawsuits that we or our licensor initiate, or that are initiated against us or our licensor, and the damages or other remedies awarded, if any, may not be commercially meaningful. In addition, changes in the law and legal decisions by courts in the United States and foreign countries may affect our ability to obtain adequate protection for our products, services and other technologies and the enforcement of intellectual property. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license. Any of the foregoing events could have a material adverse effect on our business, financial condition, results of operations and prospects.

Issued patents covering our products could be found invalid or unenforceable if challenged.

Our owned and licensed patents and patent applications may be subject to validity, enforceability and priority disputes. The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability. Some of our patents or patent applications (including licensed patents and patent applications) may be challenged at a future point in time in opposition, revocation, nullification, derivation, reexamination, *inter partes* review, post-grant review or interference or other similar proceedings. Any successful third-party challenge to our patents in this or any other proceeding could result in the unenforceability or invalidity of such patents, which may lead to increased

competition to our business, which could have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, if we or our licensor initiate legal proceedings against a third party to enforce a patent covering our products, the defendant could counterclaim that such patent covering our products, as applicable, is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. There are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, lack of written description or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the relevant patent office, or made a misleading statement, during prosecution. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include *ex parte* re-examination, *inter partes* review, post-grant review, derivation and equivalent proceedings in non-U.S. jurisdictions, such as opposition proceedings. Such proceedings could result in revocation of or amendment to our patents in such a way that they no longer cover and protect our products, or exclude our competitor's products. With respect to the validity of our patents, for example, we cannot be certain that there is no invalidating prior art of which we, our licensor, our or its patent counsel and the patent examiner were unaware during prosecution. The outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. If a defendant or other third party were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on certain aspects of our products and technologies, which could have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license intellectual property, or develop or commercialize current or future products.

We may not be aware of all third-party intellectual property rights potentially relating to our products. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until approximately 18 months after filing or, in some cases, not until such patent applications issue as patents. We might not have been the first to make the inventions covered by each of our pending patent applications and we might not have been the first to file patent applications for these inventions. To determine the priority of these inventions, we may have to participate in interference proceedings, derivation proceedings or other post-grant proceedings declared by the USPTO, or other similar proceedings in non-U.S. jurisdictions, that could result in substantial cost to us and the loss of valuable patent protection. The outcome of such proceedings is uncertain. No assurance can be given that other patent applications will not have priority over our patent applications. In addition, changes to the patent laws of the United States allow for various post-grant opposition proceedings that have not been extensively tested, and their outcome is therefore uncertain. Furthermore, if third parties bring these proceedings against our patents, regardless of the merit of such proceedings and regardless of whether we are successful, we could experience significant costs and our management may be distracted. Any of the foregoing events could have a material adverse effect on our business, financial condition, results of operations and prospects.

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business could be harmed.

We may rely heavily on trade secrets and confidentiality agreements to protect our unpatented know-how, technology and other proprietary and confidential information, including parts of the Proteograph Product Suite, and to maintain our competitive position. However, trade secrets and know-how can be difficult to protect. In particular, we anticipate that with respect to our technologies, these trade secrets and know how will over time be disseminated within the industry through independent development, the publication of journal articles describing the methodology, and the movement of personnel between academia and industry.

In addition to pursuing patents on our technology, we take steps to protect our intellectual property and proprietary technology by entering into agreements, including confidentiality agreements, non-disclosure agreements and intellectual property assignment agreements, with our employees, consultants, academic institutions, corporate partners and, when needed, our advisers. However, we cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other confidential proprietary

information will not be disclosed or that competitors or other third parties will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. For example, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure, which could have a material and adverse impact on our ability to establish or maintain a competitive advantage in the market and our business, financial condition, results of operations and prospects.

Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third party had wrongfully obtained and was using our trade secrets, it would be expensive and time-consuming, it could distract our personnel, and the outcome would be unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets.

We also seek to preserve the integrity and confidentiality of our confidential proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor or other third party, absent patent protection, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. Competitors or third parties could purchase our products and attempt to replicate some or all of the competitive advantages we derive from our development efforts, design around our protected technology, develop their own competitive technologies that fall outside the scope of our intellectual property rights or independently develop our technologies without reference to our trade secrets. If any of our trade secrets were to be disclosed to or independently discovered by a competitor or other third party, it could materially and adversely affect our business, financial condition, results of operations and prospects.

We may be subject to claims challenging the inventorship of our patents and other intellectual property.

We or our licensor have been, and may be, subject to claims that former employees, collaborators or other third parties have an interest in our owned or in-licensed patents, trade secrets or other intellectual property as an inventor or co-inventor. For example, while the inventorship on a patent is generally presumed to be correct, the company received a letter requesting the addition of a third-party as an inventor to certain intellectual property owned or licensed by the company. Moreover, we or our licensor may have inventorship disputes arise from conflicting obligations of employees, consultants or others who are involved in developing our products. In addition, counterparties to our consulting, sponsored research, software development and other agreements may assert that they have an ownership interest in intellectual property developed under such arrangements. In particular, certain software development agreements pursuant to which certain third parties have developed parts of our proprietary software may not include provisions that expressly assign to us ownership of all intellectual property developed for us by such third parties. Furthermore, certain of our sponsored research agreements pursuant to which we provide certain research services for third parties do not assign to us all intellectual property developed under such agreements. As such, we may not have the right to use all such developed intellectual property under such agreements, we may be required to obtain licenses from third parties and such licenses may not be available on commercially reasonable terms or at all, or may be non-exclusive. If we are unable to obtain such licenses and such licenses are necessary for the development, manufacture and commercialization of our products and technologies, we may need to cease the development, manufacture and commercialization of our products and technologies.

Litigation may be necessary to defend against these and other claims challenging inventorship of our or our licensor’s ownership of our owned or in-licensed patents, trade secrets or other intellectual property. If we or our licensor fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to our technologies and products, including the Proteograph solution, including our software, workflows, consumables and reagent kits. In such an event, we may be required to obtain licenses from third parties and such licenses may not be available on commercially reasonable terms or at all, or may be non-exclusive. If we are unable to obtain and maintain such licenses, we may need to cease the development, manufacture and commercialization of our products

and technologies. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees, and certain customers or partners may defer engaging with us until the particular dispute is resolved. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may not be able to protect and enforce our trademarks and trade names, or build name recognition in our markets of interest thereby harming our competitive position.

The registered or unregistered trademarks or trade names that we own may be challenged, infringed, circumvented, declared generic, lapsed or determined to be infringing on or dilutive of other marks. We may not be able to protect our rights in these trademarks and trade names, which we need in order to build name recognition. In addition, third parties have filed, and may in the future file, for registration of trademarks similar or identical to our trademarks, thereby impacting our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims, or other challenges to our trademarks, brought by owners of trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Further, from time to time, we enter into agreements with owners of such third party trade names or trademarks to avoid potential trademark litigation which may impact our ability to use our trade names or trademarks in certain fields of business. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may suffer a competitive disadvantage, and our business, financial condition, results of operations and prospects may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources. Any of the foregoing events could have a material adverse effect on our business, financial condition and results of operations.

Patent terms may be inadequate to protect our competitive position on our products and technologies, including the Proteograph Product Suite for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. While extensions may be available, the life of a patent, and the protection it affords, is limited. In the United States, a patent's term may, in certain cases, be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the USPTO in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over a commonly owned patent or a patent naming a common inventor and having an earlier expiration date. Even if patents covering our products are obtained, once the patent life has expired, we may be open to competition from competitive products. If one of our products requires extended development, testing and/or regulatory review, patents protecting such products might expire before or shortly after such products are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours, which could have a material adverse effect on our business, financial condition and results of operations.

We may become involved in lawsuits to defend against third-party claims of infringement, misappropriation or other violations of intellectual property or to protect or enforce our intellectual property, any of which could be expensive, time consuming and unsuccessful, and may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on our ability and the ability of future collaborators to develop, manufacture, market and sell our product and use our products and technologies without infringing, misappropriating or otherwise violating the intellectual property rights of third parties. There is a substantial amount of litigation involving patents and other intellectual property rights in the life sciences technology sector, as well as administrative proceedings for challenging patents, including interference, derivation, inter partes review, post grant review, and reexamination proceedings before the USPTO, or oppositions and other comparable proceedings in foreign jurisdictions. We may be exposed to, or threatened with, future litigation by third parties having patent or other intellectual property rights alleging that our products, manufacturing methods, software and/or technologies infringe, misappropriate or otherwise violate their intellectual property rights. Numerous issued patents and pending patent applications that are owned by third parties exist in the fields in which we are developing our products and

technologies. It is not always clear to industry participants, including us, the claim scope that may issue from pending patent applications owned by third parties or which patents cover various types of products, technologies or their methods of use or manufacture. Thus, because of the large number of patents issued and patent applications filed in our fields, there may be a risk that third parties, including our competitors, may allege they have patent rights encompassing our products, technologies or methods and that we are employing their proprietary technology without authorization.

If third parties, including our competitors, believe that our products or technologies infringe, misappropriate or otherwise violate their intellectual property, such third parties may seek to enforce their intellectual property, including patents, by filing an intellectual property-related lawsuit, including patent infringement lawsuit, against us. Even if we believe the third-party intellectual property claims are without merit, there is no assurance that a court would find in our favor on questions of infringement, validity, enforceability, or priority. For example, we are aware of a U.S. issued patent owned by a third party that is directed to a method for diagnosing a biological condition by analyzing certain types of proteins, including through the use of nanoparticles. Such patent is expected to expire in 2026, without taking into account any possible patent term adjustments or extensions. We are also aware of an issued patent in Europe owned by a third party directed to a method of identifying biomarkers in biofluids using nanoparticles and is projected to expire in 2037, without taking into account any possible patent term extensions. Such patents could be construed to cover certain aspects of our current or future products or technologies, including the Proteograph Product Suite. If any of these third parties, or any other third parties, were to assert these or any other patents against us and we are unable to successfully defend against any such assertion, we may be required, including by court order, to cease the development and commercialization of the infringing products or technologies and we may be required to redesign such products or technologies so they do not infringe such patents, which may not be possible or may require substantial monetary expenditures and time. We could also be required to pay damages, which could be significant, including treble damages and attorneys' fees if we are found to have willfully infringed such patents. We could also be required to obtain a license to such patents in order to continue the development and commercialization of the infringing product or technology, however such a license may not be available on commercially reasonable terms or at all, including because certain of these patents are held by or may be licensed to our competitors. Even if such license were available, it may require substantial payments or cross-licenses under our intellectual property rights, and it may only be available on a nonexclusive basis, in which case third parties, including our competitors, could use the same licensed intellectual property to compete with us. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operation or prospects.

We may choose to challenge, including in connection with any allegation of patent infringement by a third party, the patentability, validity or enforceability of any third-party patent that we believe may have applicability in our field, and any other third-party patent that may be asserted against us. Such challenges may be brought either in court or by requesting that the USPTO, European Patent Office (EPO), or other foreign patent offices review the patent claims, such as in an ex-parte reexamination, inter partes review, post-grant review proceeding, opposition or other comparable proceeding. However, there can be no assurance that any such challenge by us or any third party will be successful. Even if such proceedings are successful, these proceedings are expensive and may consume our time or other resources, distract our management and technical personnel, and the costs of these proceedings could be substantial. There can be no assurance that our defenses of non-infringement, invalidity or unenforceability in a court of law will succeed.

Third parties, including our competitors, could be infringing, misappropriating or otherwise violating our owned and in-licensed intellectual property rights. Monitoring unauthorized use of our intellectual property is difficult and costly. We may not be able to detect unauthorized use of, or take appropriate steps to enforce, our intellectual property rights. From time to time, we seek to analyze our competitors' products and services, and may in the future seek to enforce our rights against potential infringement, misappropriation or violation of our intellectual property. However, the steps we have taken to protect our intellectual property rights may not be adequate to enforce our rights as against such infringement, misappropriation or violation of our intellectual property. Any inability to meaningfully enforce our intellectual property rights could harm our ability to compete and reduce demand for our products and technologies.

Litigation proceedings may be necessary for us to enforce our patent and other intellectual property rights. In any such proceedings, a court may refuse to stop the other party from using the technology at issue on the grounds that our owned and in-licensed patents do not cover the technology in question. Further, in such proceedings, the defendant could counterclaim that our intellectual property is invalid or unenforceable and the court may agree, in which case we could lose valuable intellectual property rights, which could allow third parties to commercialize technology or products similar to ours and compete directly with us, without payment to us, or could require us to obtain license rights from the prevailing party in order to be able to manufacture or commercialize our products without infringing such party's intellectual property rights, and if we unable to obtain such a license, we may be required to cease commercialization of our products and technologies, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects. The outcome in any such proceedings are unpredictable.

Regardless of whether we are defending against or asserting any intellectual property-related proceeding, any such intellectual property-related proceeding that may be necessary in the future, regardless of outcome, could result in substantial costs and diversion of resources and could have a material adverse effect on our business, financial condition, results of operations and prospects. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions, or other interim proceedings or developments, and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our Class A common stock. Some of our competitors and other third parties may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. We may not have sufficient financial or other resources to adequately conduct these types of litigation or proceedings. Any of the foregoing, or any uncertainties resulting from the initiation and continuation of any litigation, could have a material adverse effect on our ability to raise the funds necessary to continue our operations or could otherwise have a material adverse effect on our business, financial condition, results of operations and prospects. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar material adverse effect on our business, financial condition, results of operations and prospects.

Obtaining and maintaining our patent protection depends on compliance with various required procedures, document submissions, fee payments and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States at several stages over the lifetime of the patents and/or applications. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In certain circumstances, we rely on our licensor to pay these fees due to the U.S. and non-U.S. patent agencies and to take the necessary action to comply with these requirements with respect to our licensed intellectual property. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors may be able to enter the market without infringing our patents and this circumstance would have a material adverse effect on our business, financial condition, results of operations and prospects.

Our employees, consultants, advisors or independent contractors may have wrongfully used or disclosed, or may in the future wrongfully use or disclose, confidential information or alleged trade secrets of ours, third parties or former employers.

We have employed and expect to employ individuals, and engaged consultants and expect to engage consultants, who were previously employed, or consulted, at universities or other companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants, advisors and independent contractors do not use confidential or proprietary information or know-how of others in their work for us, we may be

subject to claims that our employees, advisors, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other confidential or proprietary information of their former employers or other third parties, or to claims that we have improperly used or obtained such trade secrets. Domestic or international litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights and face increased competition to our business. Any such litigation or the threat thereof may adversely affect our ability to hire employees or contract with advisors, contractors and consultants. A loss of key research personnel work product could hamper or prevent our ability to commercialize potential products, which could harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management. This type of litigation or proceeding could substantially increase our operating losses and reduce our resources available for development activities. Some of our competitors may be able to sustain the costs of this type of litigation or proceedings more effectively than we can because of their substantially greater financial resources.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Furthermore, individuals executing agreements with us may have pre-existing or competing obligations to a third party, such as an academic institution, and thus an agreement with us may be ineffective in perfecting ownership of inventions developed by that individual, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Furthermore, we or our licensor may be subject to claims by former employees, consultants or other third parties asserting an ownership right in our owned or licensed patents or patent applications. An adverse determination in any such proceeding may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar technology, without payment to us, or could limit the duration of the patent protection covering our technology and products. Such challenges may also result in our inability to develop, manufacture or commercialize our products without infringing third-party patent rights. Any of the foregoing could harm our business, financial condition, results of operations and prospects.

We currently rely on a license from a third party, and in the future may rely on additional licenses from other third parties, in relation to our technologies and products, including the Proteograph Product Suite and if we lose any of these licenses, then we may be subjected to future litigation.

We are, and may in the future become, a party to license agreements that grant us rights to use certain intellectual property, including patents and patent applications, typically in certain specified fields of use. Currently, we rely on an in-license from The Brigham and Women's Hospital, Inc. (BWH), for patents, for example, relating to methods of using nanoparticles to measure the proteome, including the methods used in the Proteograph Product Suite and may in the future rely on licenses from other third parties with respect to our products, including the Proteograph Product Suite, or other technology. Our rights to use licensed technology in our business are subject to the continuation of and compliance with the terms of the BWH license and any licenses we may enter into in the future. Some of these licensed rights provide us with freedom to operate for aspects of our products and technologies. As a result, any termination of this license could result in the loss of significant rights and could harm our ability to develop, manufacture and commercialize our products, including the Proteograph Product Suite. We may need to obtain additional licenses from others to advance our research, development and commercialization activities. For instance, under our license agreement with BWH, we currently in-license a patent family which includes methods used in the Proteograph Product Suite, and to the extent any additional intellectual property developed by BWH that are not included in such licensed patent families are necessary or useful for the Proteograph Product Suite or any other product or technology, we would need to negotiate for additional licenses to such additional intellectual property. Such licenses may not be available on commercially reasonable terms or at all, or may be non-exclusive, in which case third parties, including our competitors, could use the same licensed intellectual property to compete

with us. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operation or prospects.

Our success may depend in part on the ability of our licensor and any future licensors to obtain, maintain and enforce patent protection for our licensed intellectual property. Under our license agreement with BWH and under any licenses we may enter into in the future, BWH controls, and future licensors may control, the prosecution, maintenance and enforcement of patents and patent applications that are licensed to us. BWH or any future licensors may not successfully prosecute the patent applications we license or prosecute such patent applications in our best interest. Even if patents issue in respect of these patent applications, BWH and any future licensors may fail to maintain these patents, may determine not to pursue litigation against other companies that are infringing these patents or may pursue such litigation less aggressively than we would. Without protection for the intellectual property we license, other companies might be able to offer substantially identical products and technologies for sale, which could materially adversely affect our competitive business position and harm our business prospects, financial condition or results of operations.

If we fail to comply with our obligations under any license, collaboration or other agreements, we may be required to pay damages and could lose intellectual property rights necessary for developing and protecting our technologies and products, including the Proteograph Product Suite, or we could lose certain rights to grant sublicenses.

Future agreements may impose, and our current license agreement imposes, various diligence, commercialization, funding, milestone payment, royalty, sublicensing, insurance, patent prosecution and enforcement and other obligations on us and require us to meet development timelines, or to exercise commercially reasonable efforts to develop and commercialize licensed products, in order to maintain the licenses. If we fail to comply with any of these obligations, a licensor(s) may have the right to terminate our license and/or we may be required to pay damages, in which event we would not be able to develop or market products or technology covered by the licensed intellectual property. In addition, while we cannot currently determine the amount of any future royalty obligations we would be required to pay on future sales of a licensed product, the amount may be significant. The amount of our future royalty obligations will depend on the technology and intellectual property we use in products we commercialize, if at all. Therefore, even if we successfully develop and commercialize existing or future products, we may be unable to achieve or maintain profitability. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects.

Moreover, disputes may also arise between us and our licensor regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- our financial or other obligations under the license agreement;
- whether, and the extent to which, our products, technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensor(s); and
- the priority of invention of patented technology.

If we do not prevail in such disputes, we may lose any or all of our rights under such license agreements, experience significant delays in the development and commercialization of our products and technologies, or incur liability for damages, any of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. In addition, we may seek to obtain additional licenses from our licensor(s) and, in connection with obtaining such licenses, we may agree to amend our existing licenses in a manner that may be more favorable to the licensor(s), including by agreeing to terms that could enable third parties, including our competitors,

to receive licenses to a portion of the intellectual property that is subject to our existing licenses and to compete with our products.

In addition, the agreements under which we currently and in the future license intellectual property or technology from third parties are complex and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize any affected products or services, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Absent the license agreements, we may infringe patents subject to those agreements, and if the license agreements are terminated, we may be subject to litigation by the licensor. Litigation could result in substantial costs to us and distract our management. If we do not prevail, we may be required to pay damages, including treble damages, attorneys' fees, costs and expenses and royalties or be enjoined from selling our products, including the Proteograph Product Suite, which could adversely affect our ability to offer products or services, our ability to continue operations and our business, financial condition, results of operations and prospects. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects.

If we cannot license rights to use technologies on reasonable terms, we may not be able to commercialize new products in the future.

We may identify third-party technology that we may need to license or acquire in order to develop or commercialize our products or technologies, including the Proteograph Product Suite. However, we may be unable to secure such licenses or acquisitions. The licensing or acquisition of third-party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us.

We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. In return for the use of a third party's technology, we may agree to pay the licensor royalties based on sales of our products or services. Royalties are a component of cost of products or technologies and affect the margins on our products. We may also need to negotiate licenses to patents or patent applications before or after introducing a commercial product. We may not be able to obtain necessary licenses to patents or patent applications, and our business may suffer if we are unable to enter into the necessary licenses on acceptable terms or at all, if any necessary licenses are subsequently terminated, if the licensor fails to abide by the terms of the license or fails to prevent infringement by third parties, or if the licensed intellectual property rights are found to be invalid or unenforceable. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects.

Certain of our in-licensed patents are, and our future owned and in-licensed patents may be, subject to a reservation of rights by one or more third parties, including government march-in rights, that may limit our ability to exclude third parties from commercializing products similar or identical to ours.

In addition, our owned and in-licensed patents may be subject to a reservation of rights by one or more third parties. For example, the U.S. government has certain rights, including march-in rights, to patent rights and technology funded by the U.S. government and licensed to us from BWH. When new technologies are developed with government funding, in order to secure ownership of such patent rights, the recipient of such funding is required to comply with certain government regulations, including timely disclosing the inventions claimed in such patent rights to the U.S. government and timely electing title to such inventions, including as set forth in the Bayh-Dole Act of

1980. Any failure to timely elect title to such inventions may provide the U.S. government to, at any time, take title in such inventions. Additionally, the U.S. government generally obtains certain rights in any resulting patents, including a non-exclusive license authorizing the government to use the invention or to have others use the invention on its behalf. If the government decides to exercise these rights, it is not required to engage us as its contractor in connection with doing so. These rights may permit the U.S. government to disclose our confidential and proprietary information to third parties and to exercise march-in rights to use or allow third parties to use our licensed technology. The U.S. government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the government-funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to U.S. industry. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the United States. Any exercise by the government of any of the foregoing rights could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our products contain third-party open source software components and failure to comply with the terms of the underlying open source software licenses could restrict our ability to sell our products and service our customers, or require disclosure of our proprietary software.

Our products contain software licensed by third parties under open source software licenses. Use and distribution of open source software may entail different or greater risks than use of third-party commercial software, as open source software licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. Some open source software licenses contain requirements that the licensee make its source code publicly available if the licensee creates combined works, modifications or derivative works using the open source software, depending on the type of open source software the licensee uses and how the licensee uses it. If we combine our proprietary software with open source software in a certain manner, we could, under certain open source software licenses, be required to release the source code of our proprietary software to the public for free. This would allow our competitors and other third parties to create similar products with less development effort and time and ultimately could result in a loss of our product sales and revenue, which could have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, some companies that use third-party open source software have faced claims challenging their use of such open source software and their compliance with the terms of the applicable open source license. We may be subject to suits by third parties claiming ownership of what we believe to be open source software, or claiming non-compliance with the applicable open source licensing terms. Use of open source software may also present additional security risks because the public availability of such software may make it easier for hackers and other third parties to compromise or attempt to compromise our technology platform and systems.

Although we review our use of open source software to avoid subjecting our proprietary software to conditions we do not intend, the terms of many open source software licenses have not been interpreted by United States courts, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our products and proprietary software. Moreover, we cannot assure investors that our processes for monitoring and controlling our use of open source software in our products will be effective. If we are held to have breached the terms of an open source software license, we could be subject to damages, required to seek licenses from third parties to continue offering our products on terms that are not economically feasible, to re-engineer our products, to discontinue the sale of our products if re-engineering could not be accomplished on a timely basis, or to make generally available, in source code form, our proprietary code, any of which could materially adversely affect our business, financial condition, results of operations and prospects.

Intellectual property rights do not necessarily address all potential threats.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make products that are similar to products and technologies we may develop or utilize similar technology that are not covered by the claims of the patents that we own or license now or in the future;
- we, or our licensor(s), might not have been the first to make the inventions covered by the issued patent or pending patent application that we license or may own in the future;
- we, or our licensor(s), might not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing, misappropriating or otherwise violating our owned or licensed intellectual property rights;
- it is possible that our pending patent applications, and our licensed pending patent applications, or those that we may own or license in the future, will not lead to issued patents;
- issued patents that we hold rights to may be held invalid or unenforceable, including as a result of legal challenges by our competitors;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we, and our licensor(s), may not develop additional proprietary technologies that are patentable;
- the patents of others may harm our business; and
- we may choose not to file a patent for certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property.

Should any of these events occur, they could materially adversely affect our business, financial condition, results of operations and prospects.

Risks Related to Ownership of Our Class A Common Stock

An active trading market for our Class A common stock may not be sustained.

Although our Class A common stock is traded on the Nasdaq Global Select Market under the symbol “SEER,” there is a limited trading history and an active trading market for our Class A common stock may not be sustained. Accordingly, we cannot assure you of your ability to sell your shares of Class A common stock when desired or the prices that you may obtain for your shares. If an active market for our Class A common stock with meaningful trading volume is not sustained, the market price of our Class A common stock may decline materially and you may not be able to sell your shares.

The market price of our Class A common stock has been and may continue to be volatile.

Some of the factors that may cause the market price of our Class A common stock to fluctuate include, but are not limited to:

- the degree to which our launch and commercialization of our products meets the expectations of securities analysts and investors;
- actual or anticipated fluctuations in our operating results, including fluctuations in our quarterly and annual results;
- revenue being less than anticipated or operating expenses being more than anticipated;
- the failure or discontinuation of any of our product development and research programs;
- changes in the structure or funding of research at academic and research laboratories and institutions, including changes that would affect their ability to purchase our instruments or consumables;
- the success of existing or new competitive businesses or technologies;
- announcements about new research programs or products of our competitors;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- litigation and governmental investigations involving us, our industry or both;
- regulatory or legal developments in the United States and other countries;
- volatility and variations in market conditions in the life sciences technology sector generally, or the proteomics or genomics sectors specifically, including volatility in the stock prices of publicly held companies in our industry;
- investor perceptions of us or our industry;
- the level of expenses related to any of our research and development programs or products;
- actual or anticipated changes in our estimates as to our financial results or development timelines, variations in our financial results or those of companies that are perceived to be similar to us or changes in estimates or recommendations by securities analysts, if any, that cover our Class A common stock or companies that are perceived to be similar to us;
- whether our financial results meet the expectations of securities analysts or investors;
- short-selling strategies that may drive down the price of our Class A common stock;
- the announcement or expectation of additional financing efforts;
- sales of our Class A common stock by us or sales of our Class A common stock or Class B common stock by our insiders or other stockholders, or future stock issuances;
- the perceived solvency of financial institutions with which we have financial deposits or investments in excess of insurance limits;
- general economic, industry and market conditions; and
- health epidemics such as the COVID-19 pandemic, natural disasters or major catastrophic events.

Recently, stock markets in general, and the market for life sciences technology companies in particular, have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to changes in the operating performance of the companies whose stock is experiencing those price and volume fluctuations, particularly in light of the current COVID-19 pandemic. Broad market and industry factors may seriously affect the market price of our Class A common stock, regardless of our actual operating performance. Following periods of such volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Because of the potential volatility of our stock price, we may become the target of securities litigation in the future. Securities litigation could result in substantial costs and divert management's attention and resources from our business.

The multi-class structure of our common stock will have the effect of concentrating voting control with certain stockholders and it may depress the trading price of our Class A common stock.

Our Class A common stock, which is our publicly-traded class of stock, has one vote per share, and our Class B common stock has ten votes per share, except as otherwise required by law. Our Class B common stock is held by our founders and early investors. As of November 3, 2023, the holders of our Class B common stock hold in the aggregate 40% of the voting power of our capital stock.

As a result, the holders of our Class B common stock collectively will continue to control a significant amount of the combined voting power of our common stock and therefore may be able to control matters submitted to our stockholders for approval. This control will limit to the stockholders' influence over corporate matters for approximately five years following our initial public offering, including the election of directors, amendments of our organizational documents and any sale of the company or other major corporate transaction requiring stockholder approval. This may prevent or discourage unsolicited proposals to acquire the company. Future transfers by holders of Class B common stock will generally result in those shares converting to Class A common stock, subject to limited exceptions, such as certain transfers effected for estate planning purposes where sole dispositive power and exclusive voting control with respect to the shares of Class B common stock is retained by the transferring holder. The Class B common stock will also automatically convert into Class A common stock on December 8, 2025. The conversion of Class B common stock to Class A common stock will have the effect, over time, of increasing the relative voting power of those individual holders of Class B common stock who retain their shares over the long term.

In July 2017, S&P Dow Jones announced that it would no longer admit companies with multiple-class share structures to certain of its indices. Affected indices include the S&P 500, S&P MidCap 400, and S&P SmallCap 600, which together make up the S&P Composite 1500. Our multi-class capital structure may make us ineligible for inclusion in certain indices, and as a result, mutual funds, exchange-traded funds and other investment vehicles that attempt to passively track these indices may not be investing in our stock. It is unclear what effect, if any, exclusion from any indices has had on the valuations of the affected publicly traded companies. It is possible that such policies could depress the valuations of public companies excluded from such indices compared to those of other companies that are included.

If industry analysts, including securities analysts do not publish research or reports about our business or if they publish negative evaluations of our Class A common stock, the price of our Class A common stock could decline.

The trading market for our Class A common stock relies in part on the research and reports that industry or securities analysts publish about us or our business. If no or few analysts commence or continue coverage of us, the trading price of our Class A common stock could decrease. If one or more of the analysts covering our business downgrade their evaluations of our Class A common stock, the price of our Class A common stock could decline. If one or more of these analysts cease to cover our Class A common stock, we could lose visibility in the market for our Class A common stock, which in turn could cause the price of our Class A common stock to decline.

Sales of a substantial number of shares of our Class A common stock by our existing stockholders could cause the price of our Class A common stock to decline.

Sales of a substantial number of shares of our Class A common stock in the public market could occur at any time and the perception in the market that the holders of a large number of shares of Class A common stock intend to sell shares could reduce the market price of our Class A common stock. Shares issued upon the exercise of stock options outstanding under our equity incentive plans or pursuant to future awards granted under those plans will become available for sale in the public market to the extent permitted by the provisions of applicable vesting schedules, any applicable market standoff and lock-up agreements, and Rule 144 and Rule 701 under the Securities Act of 1933, as amended, or the Securities Act.

We have not paid dividends in the past and do not expect to pay dividends in the future, and, as a result, any return on investment may be limited to the value of our stock.

You should not rely on an investment in our Class A common stock to provide dividend income. We do not anticipate that we will pay any dividends to holders of our Class A common stock in the foreseeable future. Instead, we plan to retain any earnings to maintain and expand our existing operations, fund our research and development programs and continue to invest in our commercial infrastructure. In addition, any future credit facility or financing we obtain may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our Class A common stock. Accordingly, investors must rely on sales of their Class A common stock after price appreciation, which may never occur, as the only way to realize any return on their investment. As a result, investors seeking cash dividends should not purchase our Class A common stock.

Our amended and restated bylaws designate a state or federal court located within the State of Delaware as the exclusive forum for substantially all disputes between us and our stockholders, and also provide that the federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act of 1933, as amended, each of which could limit our stockholders' ability to choose the judicial forum for disputes with us or our directors, officers, stockholders, or employees.

Our amended and restated certificate of incorporation specifies that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum for (a) any derivative action or proceeding brought on our behalf, (b) any action asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, stockholders, officers, or other employees to us or our stockholders, (c) any action or proceeding asserting a claim arising pursuant to, or seeking to enforce any right, obligation or remedy under, any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation, or our amended and restated bylaws, (d) any action or proceeding as to which the Delaware General Corporation Law confers jurisdiction on the Court of Chancery of the State of Delaware, or (e) any action or proceeding asserting a claim that is governed by the internal affairs doctrine shall be the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, another state court in Delaware or, if no state court in Delaware has jurisdiction, the federal district court for the District of Delaware) and any appellate court therefrom, in all cases subject to the court having jurisdiction over the claims at issue and the indispensable parties; provided that the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act.

Section 22 of the Securities Act of 1933, as amended (the Securities Act), creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated bylaws also provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act.

Any person or entity purchasing or otherwise acquiring or holding or owning (or continuing to hold or own) any interest in any of our securities shall be deemed to have notice of and consented to the foregoing bylaw provisions. Although we believe these exclusive forum provisions benefit us by providing increased consistency in the application of Delaware law and federal securities laws in the types of lawsuits to which each applies, the exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum of its choosing for disputes

with us or any of our directors, officers, stockholders, or other employees, which may discourage lawsuits with respect to such claims against us and our current and former directors, officers, stockholders, or other employees. Our stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder as a result of our exclusive forum provisions. Further, in the event a court finds either exclusive forum provision contained in our amended and restated bylaws to be unenforceable or inapplicable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our results of operations.

Delaware law and provisions in our amended and restated certificate of incorporation and amended and restated bylaws might discourage, delay or prevent a change in control of our company or changes in our management and, therefore, depress the trading price of our Class A common stock.

Our status as a Delaware corporation and the anti-takeover provisions of the Delaware General Corporation Law may discourage, delay or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. In addition, our restated certificate of incorporation and restated bylaws contain provisions that may make the acquisition of our company more difficult, including the following:

- any transaction that would result in a change in control of our company requires the approval of a majority of our outstanding Class B common stock voting as a separate class;
- our multi-class common stock structure provides our holders of Class B common stock with the ability to significantly influence the outcome of matters requiring stockholder approval, even if they own significantly less than a majority of the shares of our outstanding Class A common stock and Class B common stock;
- certain amendments to our amended and restated certificate of incorporation require the approval of stockholders holding two-thirds of the voting power of our then outstanding capital stock;
- any stockholder-proposed amendment to our amended and restated bylaws require the approval of stockholders holding two-thirds of the voting power of our then outstanding capital stock;
- our stockholders may only be able to take action at a meeting of stockholders and may not be able to take action by written consent for any matter;
- our stockholders are able to act by written consent only if the action is first recommended or approved by the board of directors;
- vacancies on our board of directors may be filled only by our board of directors and not by stockholders;
- only the chair of the board of directors, chief executive officer or a majority of the board of directors are authorized to call a special meeting of stockholders;
- certain litigation against us can only be brought in Delaware;
- our restated certificate of incorporation authorizes undesignated preferred stock, the terms of which may be established and shares of which may be issued, without the approval of the holders of our capital stock; and
- advance notice procedures apply for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders.

These anti-takeover defenses could discourage, delay, or prevent a transaction involving a change in control of our company. These provisions could also discourage proxy contests and make it more difficult for stockholders to elect directors of their choosing and to cause us to take other corporate actions they desire, any of which, under certain circumstances, could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock and could also affect the price that some investors are willing to pay for our Class A common stock.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations, and changes to U.S. tax laws may cause us to make adjustments to our financial statements.

As of December 31, 2022, we had U.S. federal and state net operating loss carryforwards (NOLs) of $119.4 million and $122.5 million, respectively, which if not utilized will expire in 2035 for state purposes. We may use these NOLs to offset against taxable income for U.S. federal and state income tax purposes. However, Section 382 of the Internal Revenue Code of 1986, as amended, may limit the NOLs we may use in any year for U.S. federal income tax purposes in the event of certain changes in ownership of our company. A Section 382 "ownership change" generally occurs if one or more stockholders or groups of stockholders who own at least 5% of a company's stock increase their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. Similar rules may apply under state tax laws. We have not conducted a 382 study to determine whether the use of our NOLs is impaired. We may have previously undergone multiple "ownership changes." In addition, future issuances or sales of our stock, including certain transactions involving our stock that are outside of our control, could result in future "ownership changes." "Ownership changes" that have occurred in the past or that may occur in the future could result in the imposition of an annual limit on the amount of pre-ownership change NOLs and other tax attributes we can use to reduce our taxable income, potentially increasing and accelerating our liability for income taxes, and also potentially causing those tax attributes to expire unused. States may impose other limitations on the use of our NOLs. Any changes in U.S. tax laws or limitations on using NOLs could, depending on the extent of such limitation and the NOLs previously used, result in our retaining less cash after payment of U.S. federal and state income taxes during any year in which we have taxable income, rather than losses, than we would be entitled to retain if such NOLs were available as an offset against such income for U.S. federal and state income tax reporting purposes, which could adversely impact our operating results.

We continue to incur significant increased costs and management resources as a result of operating as a public company.

As a public company, we continue to incur significant legal, accounting, compliance, insurance and other expenses that we did not incur as a private company. Our management and other personnel need to devote a substantial amount of time and incur significant expense in connection with compliance initiatives. As a public company, we continue to bear all of the internal and external costs of preparing and distributing periodic public reports in compliance with our obligations under the securities laws.

In addition, regulations and standards relating to corporate governance and public disclosure, including SOX, and the related rules and regulations implemented by the SEC and the Nasdaq Stock Market, LLC (Nasdaq) have increased legal and financial compliance costs and make some compliance activities more time-consuming. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment will result in increased general and administrative expenses and may divert management's time and attention from our other business activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us, and our business may be harmed. In the future, it may be more expensive or more difficult for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee and compensation committee, and qualified executive officers.

General Risks

Environmental, social, and governance (ESG) matters are subject to increasing scrutiny and evolving expectations from customers, regulators, investors and other stakeholders and may expose us to reputational, cost and other risks.

Companies across all industries are subject to increasing scrutiny and evolving expectations regarding ESG matters. In particular, customers, regulators, investors and other stakeholders are increasingly focusing on environmental issues, including climate change, energy use, industrial waste, and other sustainability concerns. Failure to implement sufficient standards and practices for responsible corporate citizenship, support for local communities,

employee diversity and human capital management, health and safety practices, supply chain management, and corporate governance can increase our costs of production, decrease our revenue, and negatively affect our reputation, employee retention, and the general willingness of customers and suppliers to do business with us and investors to invest in us. If we do not adapt to or comply with evolving ESG standards and regulations, the resulting consequences could have a material adverse effect on our reputation, business and financial condition.

If our facilities or our third-party manufacturers' facilities become unavailable or inoperable, our research and development program and commercialization plan could be adversely impacted and manufacturing of our instruments and consumables could be interrupted.

Our Redwood City, California, facilities house our corporate, research and development, NP manufacturing and quality assurance teams. Our instruments are manufactured at our third-party manufacturer's facilities in Nevada, and our consumables are manufactured at various locations in the United States and internationally.

Our facilities in Redwood City and those of our third-party manufacturers are vulnerable to natural disasters, public health crises, including the impact of health epidemics such as the COVID-19 pandemic, climate change and catastrophic events. For example, our Redwood City facilities are located near earthquake fault zones and are vulnerable to damage from earthquakes as well as other types of disasters, including fires, wildfires, floods, power loss, communications failures and similar events. If any disaster, public health crisis or catastrophic event were to occur, our ability to operate our business would be seriously, or potentially completely, impaired. If our facilities or our third-party manufacturer's facilities become unavailable for any reason, we cannot provide assurances that we will be able to secure alternative manufacturing facilities with the necessary capabilities and equipment on acceptable terms, if at all. We may encounter particular difficulties in replacing our Redwood City facilities given the specialized equipment housed within it. The inability to manufacture our instruments or consumables, combined with our limited inventory of manufactured instruments and consumables, may result in the loss of future customers or harm our reputation, and we may be unable to re-establish relationships with those customers in the future. Because some of our NPs are perishable and must be kept in temperature controlled storage, the loss of power to our facilities, mechanical or other issues with our storage facilities or other events that impact our temperature controlled storage could result in the loss of some or all of such NPs, and we may not be able to replace them without disruption to our customers or at all.

If our research and development program or commercialization program were disrupted by a disaster or catastrophe, the launch of new products, including the Proteograph Product Suite, and the timing of improvements to our products could be significantly delayed and could adversely impact our ability to compete with other available products and solutions. If our or our third-party manufacturer's capabilities are impaired, we may not be able to manufacture and ship our products in a timely manner, which would adversely impact our business. Although we possess insurance for damage to our property and the disruption of our business, and self-insure for earthquake risk, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, or at all.

If we, or our vendors, partners or customers, experience a significant disruption in our information technology systems or breaches of data security, our business could be adversely affected.

We rely, or will rely, on information technology systems to keep financial records, facilitate our research and development initiatives, manage our manufacturing operations, maintain quality control, fulfill customer orders, maintain corporate records, communicate with staff and external parties and operate other critical functions. Our information technology systems and those of our vendors, partners and customers are potentially vulnerable to disruption due to breakdown, malicious intrusion and computer viruses or other disruptive events, including, but not limited to, natural disasters and catastrophes. Cyberattacks (including denial of service, ransomware, and other attacks) and other malicious internet-based activity continue to increase and cloud-based platform providers of services have been and are expected to continue to be targeted. Methods of attacks on information technology systems and data security breaches change frequently, are increasingly complex and sophisticated, including social engineering and phishing scams, and can originate from a wide variety of sources. In addition to traditional computer "hackers," malicious code, such as viruses and worms, employee theft or misuse, denial-of-service attacks and sophisticated nation-state and nation-state supported actors now engage in attacks, including advanced persistent

threat intrusions. Despite our efforts to create security barriers to such threats, it is virtually impossible for us to entirely mitigate these risks. In addition, we have not finalized our information technology and data security procedures and therefore, our information technology systems may be more susceptible to cybersecurity attacks than if such security procedures were finalized. Despite any of our current or future efforts to protect against cybersecurity attacks and data security breaches, there is no guarantee that our efforts are adequate to safeguard against all such attacks and breaches. Moreover, it is possible that we may not be able to anticipate, detect, appropriately react and respond to, or implement effective preventative measures against, all cybersecurity incidents. In addition, our information technology strategy encompasses multi-vendor, multi-cloud infrastructure, systems and applications. We have a shared responsibility model with our information technology vendors and rely on their security measures and controls. We have not conducted a comprehensive evaluation of all vendors to understand their security postures.

If our security measures, or those of our vendors, partners and customers, are compromised due to any cybersecurity attacks or data security breaches, including as a result of third-party action, employee or customer error, malfeasance, stolen or fraudulently obtained log-in credentials or otherwise, our reputation could be damaged, our business and reputation may be harmed, we could become subject to litigation and we could incur significant liability. If we were to lose data or experience a prolonged system disruption in our information technology systems or those of certain of our vendors and partners, it could negatively impact our ability to serve our customers, which could adversely impact our business, financial condition, results of operations and prospects. If operations at our facilities were disrupted, it may cause a material disruption in our business if we are not capable of restoring functionality on an acceptable timeframe.

In addition, our information technology systems, and those of our vendors, partners and customers, are potentially vulnerable to data security breaches, whether by internal bad actors, such as employees or other third parties with legitimate access to our or our third-party providers' systems, or external bad actors, which could lead to the loss or exposure of personal data, sensitive data and confidential information to unauthorized persons. Any such data security breaches could lead to the loss of trade secrets or other intellectual property, the exposure of personal information, including sensitive personal information, of our employees, customers and others, or could prevent us from accessing critical information, any of which could expose us to liability and have a material adverse effect on our business, reputation, financial condition and results of operations. Moreover, due to the inherent features and technical limitations of information technology systems and infrastructure, our products and services may be impacted by cyberattacks or other disruptions, including efforts to penetrate our customers' network security, sabotage or otherwise disable our instruments and services, including instruments at our customers' sites, misappropriate our customers' proprietary information, or cause interruptions of our or our customers' internal operations, systems and services. Any such breach could compromise our customers' networks and the information stored there could be accessed, publicly disclosed, lost or stolen.

In addition, any such access, disclosure or other loss or unauthorized use of information or data could result in legal claims or proceedings, regulatory investigations or actions, and other types of liability under laws that protect the privacy and security of personal information, including federal, state and foreign data protection and privacy regulations, violations of which could result in significant penalties and fines. Additionally, a new privacy law, the California Privacy Rights Act (CPRA), went into effect on January 1, 2023. The CPRA modifies the California Consumer Privacy Act (CCPA) significantly, potentially resulting in further uncertainty and requiring us to incur additional costs and expenses in an effort to comply. The CPRA restricts use of certain categories of sensitive personal information that we may handle, establish restrictions on the retention of personal information, expand the types of data breaches subject to the private right of action, and establish the California Privacy Protection Agency to implement and enforce the new law and impose administrative fines. Additional compliance investment and potential business process changes will likely be required. Similar laws have been proposed in other states and at the federal level, reflecting a trend toward more stringent data privacy and security legislation in the United States. For example, on March 2, 2021, Virginia enacted the Virginia Consumer Data Protection Act, or CDPA, which took effect on January 1, 2023, on June 8, 2021, Colorado enacted the Colorado Privacy Act, or CPA, which took effect on July 1, 2023, and on March 24, 2022, Utah enacted the Utah Consumer Privacy Act, or UCPA, which takes effect on December 31, 2023; and on May 10, 2022, Connecticut enacted the Connecticut Data Privacy Act, or CTDPA, which took effect on July 1, 2023. The CPA, CDPA, UCPA, and CTDPA share similarities with and differences

from the CPRA and legislation proposed in other states. Aspects of these state privacy statutes remain unclear, resulting in further uncertainty and potentially requiring us to modify our data practices and policies and to incur substantial additional costs and expenses in an effort to comply. In addition, U.S. and international laws and regulations that have been applied to protect user privacy (including laws regarding unfair and deceptive practices in the U.S. and GDPR in the EU) may be subject to evolving interpretations or applications. Furthermore, defending a suit, regardless of its merit, could be costly, divert management's attention and harm our reputation. In addition, although we seek to detect and investigate all data security incidents, security breaches and other incidents of unauthorized access to our information technology systems and data can be difficult to detect and any delay in identifying such breaches or incidents may lead to increased harm and legal exposure of the type described above. Moreover, there could be public announcements regarding any cybersecurity incidents and any steps we take to respond to or remediate such incidents, and if securities analysts or investors perceive these announcements to be negative, it could, among other things, have a material adverse effect on the price of our Class A common stock.

The cost of protecting against, investigating, mitigating and responding to potential breaches of our information technology systems and data security breaches and complying with applicable breach notification obligations to individuals, regulators, partners and others can be significant. As cybersecurity incidents continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities. The inability to implement, maintain and upgrade adequate safeguards could have a material adverse effect on our business, financial condition, results of operations and prospects. Our insurance policies may not be adequate to compensate us for the potential costs and other losses arising from such disruptions, failures or security breaches. In addition, such insurance may not be available to us in the future on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, financial condition, results of operations and prospects.

We are currently subject to, and may in the future become subject to additional international and U.S. federal and state laws and regulations imposing obligations on how we collect, store and process personal information. Our actual or perceived failure to comply with such obligations could harm our business. Ensuring compliance with such laws could also impair our efforts to maintain and expand our future customer base, and thereby decrease our revenue.

In the ordinary course of our business, we currently, and in the future will, collect, store, transfer, use or process sensitive data, including personally identifiable information of employees, and intellectual property and proprietary business information owned or controlled by ourselves and other parties. The secure processing, storage, maintenance, and transmission of this critical information are vital to our operations and business strategy. We are, and may increasingly become, subject to various international and domestic laws and regulation relating to data privacy and security in the jurisdictions in which we operate. We also may be subject to contractual obligations and may be, or may be asserted to be, subject to industry standards relating to privacy and data security. The regulatory environment related to data privacy and security is increasingly rigorous, with new and constantly changing requirements applicable to our business, and enforcement practices are likely to remain uncertain for the foreseeable future. These laws and regulations may be interpreted and applied differently over time and from jurisdiction to jurisdiction, and it is possible that they will be interpreted and applied in ways that may have a material adverse effect on our business, financial condition, results of operations and prospects.

In the United States, various federal and state regulators, including governmental agencies like the Consumer Financial Protection Bureau and the Federal Trade Commission, have adopted, or are considering adopting, laws and regulations concerning personal information and data security. Certain state laws may be more stringent or broader in scope, or offer greater individual rights, with respect to personal information than federal, international or other state laws, and such laws may differ from each other, all of which may complicate compliance efforts. For example, the CCPA, which increases privacy rights for California residents and imposes obligations on companies that process their personal information, came into effect on January 1, 2020, and the CPRA, which increases such rights and responsibilities, came into effect on January 1, 2023. Among other things, the CCPA requires covered companies to provide new disclosures to California consumers and provide such consumers new data protection and

privacy rights, including the ability to opt-out of certain sales of personal information. The CCPA provides for civil penalties for violations, as well as a private right of action for certain data breaches that result in the loss of personal information. This private right of action may increase the likelihood of, and risks associated with, data breach litigation. In addition, laws in all 50 U.S. states require businesses to provide notice to consumers whose personal information has been disclosed as a result of a data breach. State laws are changing rapidly and there is discussion in the U.S. Congress of a new comprehensive federal data privacy law to which we would become subject if it is enacted.

Furthermore, regulations promulgated pursuant to the Health Insurance Portability and Accountability Act of 1996 (HIPAA), establish privacy and security standards that limit the use and disclosure of individually identifiable health information (known as "protected health information") and require the implementation of administrative, physical and technological safeguards to protect the privacy of protected health information and ensure the confidentiality, integrity and availability of electronic protected health information. Determining whether protected health information has been handled in compliance with applicable privacy standards and our contractual obligations can require complex factual and statistical analyses and may be subject to changing interpretation. Although we take measures to protect sensitive data from unauthorized access, use or disclosure, our information technology and infrastructure may be vulnerable to attacks by hackers or viruses or breached due to employee error, malfeasance or other malicious or inadvertent disruptions. Any such breach or interruption could compromise our networks and the information stored there could be accessed by unauthorized parties, manipulated, publicly disclosed, lost or stolen. Any such access, breach or other loss of information could result in legal claims or proceedings, and liability under federal or state laws that protect the privacy of personal information, such as the HIPAA, the Health Information Technology for Economic and Clinical Health Act (HITECH), and regulatory penalties. Notice of breaches must be made to affected individuals, the Secretary of the Department of Health and Human Services, and for extensive breaches, notice may need to be made to the media or State Attorneys General. Such a notice could harm our reputation and our ability to compete.

We have adopted and train our employees and applicable consultants on our policies related to the collection, processing, and storage of information, including personal data of employees and scientific data of customers. From time to time, we conduct internal and external audits to assess our ability, and comment on our vendors' ability, to comply with evolving compliance and operational requirements, which could impose significant costs, such as costs related to organizational changes, implementing additional protection technologies, training employees and engaging consultants, which are likely to increase over time. In addition, such requirements may require us to modify our data processing practices and policies, distract management or divert resources from other initiatives and projects, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Any failure or perceived failure by us or our third-party vendors, collaborators, contractors and consultants to comply with any applicable federal, state or similar foreign laws and regulations relating to data privacy and security, including GDPR, could result in damage to our reputation, as well as proceedings or litigation by governmental agencies or other third parties, including class action privacy litigation in certain jurisdictions, which would subject us to significant fines, sanctions, awards, penalties or judgments, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Item 2. Unregistered Sales of Equity Securities

None.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosure

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit Number	Description	Form	File No.	Exhibit	Filing Date
10.1+	Key Executive Change in Control and Severance Plan				*
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				*
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				*
32.1†	Certification of Principal Executive Officer 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 Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				*
101.INS	XBRL Instance Document				
101.SCH	XBRL Taxonomy Extension Schema Document				
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB	XBRL Taxonomy Extension Label Linkbase Document				
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document				

+ Indicate management contract

† The certifications attached as Exhibit 32.1 and 32.2 that accompany this Quarterly Report on Form 10-Q, are deemed furnished and not filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Quarterly Report on Form 10-Q, irrespective of any general incorporation language contained in such filing.

* Filed herewith

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.

SEER, INC.

Date: November 7, 2023

By: /s/ Omid Farokhzad, M.D.

Omid Farokhzad, M.D.
Chief Executive Officer, President and
Chair of the Board of Directors
(*Principal Executive Officer*)

Date: November 7, 2023

By: /s/ David R. Horn

David R. Horn
Chief Financial Officer
(*Principal Financial Officer and Accounting Officer*)

SEER, INC.

KEY EXECUTIVE CHANGE IN CONTROL AND SEVERANCE PLAN
As Amended and Restated

1. **Introduction**. This Seer, Inc. Key Executive Change in Control and Severance Plan (as may be amended from time to time, this "**Plan**") has been adopted by Seer, Inc. (the "**Company**"), effective as of the day immediately prior to the Registration Date (the "**Effective Date**"), in order to provide specified severance pay and benefits to Eligible Employees who (a) incur qualifying terminations of employment, and (b) abide by the terms and conditions for participation in, and receipt of such pay and benefits, as set forth in the Plan. The Plan has most recently been amended and restated as of February 8, 2022 (the "**February 2022 Restatement Date**").

2. **Important Terms**. The following capitalized words and phrases will have the meanings set forth in this Section 2:

2.a. "**Administrator**" means the Company, acting through the Board (as defined below), the Compensation Committee of the Board or another duly constituted committee of members of the Board, or any person to whom the Administrator or the Board has delegated any authority or responsibility with respect to the Plan pursuant to Section 14, but only to the extent of such delegation.

2.b. "**Board**" means the Board of Directors of the Company.

2.c. "**Cause**" has the meaning set forth in the Participant's Participation Agreement for such term. The determination of whether grounds for Cause exists, including the determination of the cure of any event and/or action, omission or event constituting grounds for Cause, will be made in all cases by the Administrator in accordance with authorities and deference afforded to the Administrator under Section 14 of the Plan.

2.d. "**Change in Control**" means the first occurrence of any of the following events on or after the Effective Date:

(1) A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("**Person**"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than fifty percent (50%) of the total voting power of the stock of the Company; provided, however, that for purposes of this subsection (a), the acquisition of additional stock by any one Person, who is considered to own more than fifty percent (50%) of the total voting power of the stock of the Company will not be considered a Change in Control; provided, further, that any change in the ownership of the stock of the Company as a result of a private financing of the Company that is approved by the Board also will not be considered a Change in Control. Further, if the stockholders of the Company immediately before such change in ownership continue to retain immediately after the change in ownership, in substantially the same proportions as their ownership of shares of the Company's voting stock immediately prior to the change in ownership, direct or indirect beneficial ownership of fifty percent (50%) or more of the total voting power of the stock of the Company or of the ultimate parent entity of the Company, such event will not be considered a Change in Control under this subsection (a). For this purpose, indirect beneficial ownership will include, without

limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own the Company, as the case may be, either directly or through one or more subsidiary corporations or other business entities; or

(2) If the Company has a class of securities registered pursuant to Section 12 of the Exchange Act, a change in the effective control of the Company which occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this subsection (ii), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(3) A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such Person or Persons) assets from the Company that have a total gross fair market value equal to or more than fifty percent (50%) of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (c), the following will not constitute a change in the ownership of a substantial portion of the Company's assets: (i) a transfer to an entity that is controlled by the Company's stockholders immediately after the transfer, or (ii) a transfer of assets by the Company to: (A) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's stock, (B) an entity, fifty percent (50%) or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (C) a Person, that owns, directly or indirectly, fifty percent (50%) or more of the total value or voting power of all the outstanding stock of the Company, or (D) an entity, at least fifty percent (50%) of the total value or voting power of which is owned, directly or indirectly, by a Person described in this subsection (c)(ii)(C). For purposes of this subsection (c), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this definition, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Code Section 409A. Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (x) its primary purpose is to change the jurisdiction of the Company's incorporation, or (y) its primary purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

2.e. "**Change in Control Period**" means, unless otherwise defined in a Participant's Participation Agreement, the time period beginning upon the consummation of a Change in Control and ending on (and inclusive of) the date that is twelve (12) months following such Change in Control.

2.f. "**Code**" means the Internal Revenue Code of 1986, as amended. Reference to a specific section of the Code or regulation under the Code will include such section or regulation, and any valid regulation or other formal guidance of general or direct applicability promulgated

under such section, and any comparable provision of any future legislation amending, supplementing or superseding such section or regulation.

2.g. "**Company**" means Seer, Inc., a Delaware corporation, and any successor as described in Section 25.

2.h. "**Deferred Payments**" means any Severance Benefits to be paid or provided to a Participant pursuant to this Plan and any other severance payments or separation benefits to be paid or provided to such Participant, that in each case, when considered together, are considered deferred compensation under Section 409A.

2.i. "**Disability**" means total and permanent disability as defined in Code Section 22(e)(3). The Administrator will determine whether a Participant has incurred a Disability based on such evidence as the Administrator deems necessary or advisable. The Administrator's determination as to a Participant's Disability will be final and binding.

2.j. "**Effective Date**" has the meaning assigned to it in Section 1 of the Plan.

2.k. "**Eligible Employee**" means an employee who is a member of a "select group of management or highly compensated employees" (within the meaning of Sections 201(2), 301(a)(3) and 401(a)(1) of ERISA) of the Company or of any parent or subsidiary of the Company and who has been designated by the Administrator as being eligible to participate in the Plan and has been provided a Participation Agreement by the Administrator.

2.l. "**Employer**" means, with respect to an Eligible Employee, the Company or the parent or subsidiary of the Company that directly employs such employee.

2.m. "**Equity Awards**" mean a Participant's outstanding Company stock options, stock appreciation rights, restricted stock, restricted stock units, performance shares, performance stock units, and other Company equity compensation awards, if any.

2.n. "**ERISA**" means the U.S. Employee Retirement Income Security Act of 1974, as amended. Any reference to a specific section of ERISA will include such section and any valid regulation or other applicable guidance that has been promulgated under such section and is in effect and any comparable provision of any future legislation amending, supplementing or superseding such section then in effect.

2.o. "**Good Reason Termination**" has the meaning set forth in the Participant's Participation Agreement for such term. The determination of whether a Good Reason Termination exists, including the determination of the cure of any event and/or breach constituting a Good Reason Termination, will be made in all cases by the Administrator in accordance with authorities and deference afforded to the Administrator under Section 14 of the Plan.

2.p. "**Grandfathered Award**" means any Equity Award granted to an applicable Participant before the Registration Date.

2.q. "**Involuntary Termination**" means the termination of a Participant's employment with the Employer under the circumstances described in Section 4. For the avoidance

of doubt, an Involuntary Termination will not be considered to occur upon transfer of a Participant's employment between Employers.

2.r. "**Monthly Base Salary**" means a Participant's monthly base salary rate in effect immediately before the date on which his or her Involuntary Termination occurs; provided, however, that if the Involuntary Termination is a Good Reason Termination (if and to the extent the Participant's Participation Agreement provides eligibility for benefits upon such Good Reason Termination) based on the clause of the applicable definition of Good Reason Termination (if any), relating to a material reduction by the Company in the Participant's then-current annual base salary, then Participant's Monthly Base Salary will be not less than his monthly base salary rate in effect immediately prior to such reduction; provided, further, that in the event Participant's Involuntary Termination occurs during the Change in Control Period, then the Eligible Employee's Monthly Base Salary will be not less than his or her monthly base salary rate in effect immediately before the Change in Control Period. The determination of the amount of a Participant's Monthly Base Salary will be made by the Administrator, in accordance with the records of the Employer.

2.s. "**Participant**" means an Eligible Employee who has timely and properly executed and timely delivered his or her Participation Agreement to the Administrator, as set forth therein. A Participant's Severance Benefit levels will be determined by the Administrator and reflected in the Participant's Participation Agreement, as designated by the Administrator in its sole discretion.

2.t. "**Participation Agreement**" means the individual agreement provided by the Administrator to an employee of an Employer designating such employee as an Eligible Employee under the Plan. A form of Participation Agreement updated as of the February 2022 Restatement Date is attached hereto as Appendix A.

2.u. "**Registration Date**" means the effective date of the first registration statement that is filed by the Company and declared effective pursuant to Section 12(b) of the U.S. Securities Exchange Act of 1934, as amended, with respect to any class of the Company's securities.

2.v. "**Section 409A**" means Section 409A of the Code.

2.w. "**Severance Benefits**" means the separation-related compensation and other benefits that a Participant will be provided in the circumstances described in Section 4 or Section 5 and set forth in his or her Participation Agreement.

2.x. "**Target Bonus**" means a Participant's annualized target bonus amount under the applicable Employer bonus plan, as in effect for the performance period in which the Participant's Involuntary Termination occurs; provided, however, that in the event such Involuntary Termination occurs during the Change in Control Period, then the Participant's Target Bonus will be not less than such target bonus amount for the Participant as in effect for the performance period in which the Change in Control occurs. The determination of the amount of a Participant's Target Bonus will be made by the Administrator, in accordance with the records of the Employer.

2.y. "**Time-based Equity Award**" means any Equity Award granted to an applicable Participant that, as of the applicable date, is scheduled to vest based solely on the Participant's continued service with the Employer, the Company, and/or any parent and/or subsidiary of the Company, as applicable, through the scheduled date(s) of vesting. For the

avoidance of doubt, an outstanding Equity Award (or portion thereof) granted to a Participant for which, as of the applicable date, any performance-based vesting requirements have been fully achieved or otherwise no longer apply, and which remains subject solely to vesting requirements based only on the Participant's continued service with the Employer, the Company and/or any parent and/or subsidiary of the Company, as applicable, through the scheduled date(s) of vesting, is considered a Time-based Equity Award as of the applicable date.

3. **Eligibility for Severance Benefits**. A Participant is eligible for Severance Benefits under the Plan, as described in Section 4, only if he or she is an Eligible Employee on the date he or she experiences an Involuntary Termination and otherwise satisfies the requirements of the Plan.

4. **Involuntary Termination**.

4.a. **Involuntary Termination During Change in Control Period**. If, during the Change in Control Period, (a) the Employer terminates a Participant's employment with the Employer for a reason other than (x) Cause, (y) the Participant's death, or (z) the Participant's Disability, or (b) the Participant terminates his or her employment with the Employer due to a Good Reason Termination (but with respect to clause (b), only if so provided in the Participant's Participation Agreement), then, solely to the extent specifically provided in the Participant's Participation Agreement, the Participant will receive the following Severance Benefits, subject to Section 6 and Sections 8 through 13 and the Participant's compliance with Sections 7.1 and 7.3:

4.1.1 **Cash Severance Benefit.** Payments of cash severance for the period and in the amounts set forth in the Participant's Participation Agreement;

4.1.2 **COBRA Benefit**. If the Participant and any spouse and/or other dependents of the Participant ("**Family Members**") have coverage under the group health plan(s) sponsored by the Company on the date of the Participant's Involuntary Termination (such coverage, "**Qualifying Health Coverage**"), either reimbursement for the payments the Participant makes, or direct payments by the Company or the Employer to the insurance provider, at the Company's election, of the premiums for medical, vision and dental coverage for Participant and Participant's eligible dependents under Title X of the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended or comparable applicable state law ("**COBRA**") (such reimbursements or direct payments, the "**COBRA Benefits**") for the period set forth in the Participant's Participation Agreement or until Participant has secured other employment that provides group health insurance coverage, whichever occurs first, subject to Participant timely electing COBRA coverage, remaining eligible for COBRA continuation coverage and, with respect to reimbursements, timely paying for COBRA coverage. Any COBRA reimbursements under this Plan will be made by the Company to Participant consistent with the Company's normal expense reimbursement policy, provided further that Participant submits documentation to the Company substantiating his or her payments for COBRA coverage. Notwithstanding anything to the contrary in the Plan or any Participation Agreement, if at any time the Company determines in its sole discretion that the COBRA Benefits contemplated by this Section 4.1.2 cannot be provided to a Participant without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), such Participant will not receive such COBRA Benefits, and Participant will not receive any benefits or payments in lieu thereof; and

4.1.3 **Equity Award Vesting Acceleration Benefit**. The Participant's Time-based Equity Awards will accelerate vesting to the extent provided in the Participant's Participation Agreement.

4.1.4 **Miscellaneous Benefit(s)**. The Participant will be entitled to such additional benefits, if any, to the extent and on the terms and conditions provided in the Participant's Participation Agreement.

4.b. **Involuntary Termination Other Than During the Change in Control Period**. If (a) the Employer terminates a Participant's employment for a reason other than (x) Cause, (y) the Participant's death, or (z) the Participant's Disability, or (b) the Participant terminates his or her employment with the Employer due to a Good Reason Termination (but with respect to clause (b), only if so provided in the Participant's Participation Agreement), and in either case such Involuntary Termination does not occur during the Change in Control Period, then, solely to the extent specifically provided in the Participant's Participation Agreement, the Participant will receive the following Severance Benefits, subject to Section 6 and Sections 8 through 13 and the Participant's compliance with Sections 7.1 and 7.3:

4.2.1 **Cash Severance Benefit.** Payments of cash severance for the period and in the amounts set forth in the Participant's Participation Agreement;

4.2.2 **COBRA Benefit**. If the Participant and any Family Members have Qualifying Health Coverage, COBRA Benefits for the period set forth in the Participant's Participation Agreement or until Participant has secured other employment that provides group health insurance coverage, whichever occurs first, and subject to Participant timely electing COBRA coverage, remaining eligible for COBRA continuation coverage and, with respect to reimbursements, timely paying for COBRA coverage. Any COBRA reimbursements under this Plan will be made by the Company to Participant consistent with the Company's normal expense reimbursement policy, provided further that Participant submits documentation to the Company substantiating his or her payments for COBRA coverage. Notwithstanding anything to the contrary in the Plan or any Participation Agreement, if at any time the Company determines in its sole discretion that the COBRA Benefits contemplated by this Section 4.1.2 cannot be provided to a Participant without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), such Participant will not receive such COBRA Benefits, and Participant will not receive any benefits or payments in lieu thereof; and

4.2.3 **Equity Award Vesting Acceleration Benefit**. The Participant's Time-based Equity Awards will accelerate vesting to the extent provided in the Participant's Participation Agreement.

4.2.4 **Miscellaneous Benefit(s)**. The Participant will be entitled to such additional benefits, if any, to the extent and on the terms and conditions provided in the Participant's Participation Agreement.

5. **Grandfathered Award Vesting Acceleration Benefit Following a Change in Control**.

5.a. **Grandfathered Award Severance**. If so provided in the Participant's Participation Agreement, in the event of the Participant's Involuntary Termination occurring within

the time period following a Change in Control that is specified in the Participant's Participation Agreement, the Participant's Grandfathered Awards, if any, which are then outstanding and unvested will accelerate vesting and (if applicable) become exercisable as to the amount(s), at the time(s) and subject to the terms and conditions as set forth in the Participant's Participation Agreement, subject to Section 6, Sections 8 through 11 and Section 13 and the Participant's compliance with Sections 7.1 and 7.3 (the "**Grandfathered Award Severance**"). For the avoidance of doubt, any Grandfathered Award Severance is considered a "Severance Benefit" for purposes of the Agreement and is subject to the Severance Release requirements of Section 7.1.

5.b. **Retention Acceleration**. If so provided in the Participant's Participation Agreement, in the event the Participant remains employed with the Company, the Participant's Employer or a parent or subsidiary of the Company through a specified period following a Change in Control that is specified in the Participant's Participation Agreement (the last date of such period, the "**Retention Date**"), Participant's Grandfathered Awards, if any, which are then outstanding and unvested will accelerate vesting and (if applicable) become exercisable as to the amount(s), at the time(s) and subject to the terms and conditions as set forth in the Participant's Participation Agreement, subject to Section 6 and Sections 8 through 11 and Section 13 and the Participant's compliance with Section 7.2 (such acceleration, the "**Grandfathered Award Retention Acceleration**").

6. **Limitation on Payments**.

6.a. **Reduction of Severance Benefits**. If any payment or benefit that Participant would receive from the Company, an Employer or any other party whether in connection with the provisions in this Plan or otherwise (the "**Payments**") would (a) constitute a "parachute payment" within the meaning of Section 280G of the Code and (b) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "**Excise Tax**"), then the Payments will be either delivered in full, or delivered as to such lesser extent that would result in no portion of the Payments being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the Excise Tax, results in Participant's receipt, on an after-tax basis, of the greatest amount of Payments, notwithstanding that all or some of the Payments may be subject to the Excise Tax. If a reduction in Payments is made in accordance with the immediately preceding sentence, the reduction will occur, with respect to the Payments considered parachute payments within the meaning of Code Section 280G, in the following order: (i) reduction of cash payments in reverse chronological order (that is, the cash payment owed on the latest date following the occurrence of the event triggering the Excise Tax will be the first cash payment to be reduced); (ii) cancellation of equity awards that were granted "contingent on a change in ownership or control" within the meaning of Section 280G of the Code in the reverse order of date of grant of the equity awards (that is, the most recently granted equity awards will be cancelled first); (iii) reduction of the accelerated vesting of equity awards in the reverse order of date of grant of the equity awards (that is, the vesting of the most recently granted equity awards will be cancelled first); and (iv) reduction of employee benefits in reverse chronological order (that is, the benefit owed on the latest date following the occurrence of the event triggering the Excise Tax will be the first benefit to be reduced). In no event will Participant have any discretion with respect to the ordering of Payment reductions. Participant will be solely responsible for the payment of all personal tax liability that is incurred as a result of the payments and benefits received under this Plan, and neither the Company nor any Employer or other affiliate of the Company will have any responsibility, liability or obligation to reimburse, indemnify or hold harmless any Participant for any of those payments of personal tax liability.

6.b. **Determination of Excise Tax Liability**. Any determinations required under this Section 6 will be made in writing by a nationally recognized accounting or valuation firm (the "**Firm**") selected by the Company, whose determinations will be conclusive and binding upon Participant and the Company for all purposes. For purposes of making the calculations required by this Section 6, the Firm may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and Participant will furnish to the Firm such information and documents as the Firm reasonably may request in order to make determinations under this Section 6. The Company will bear the costs and make all payments required to be made to the Firm for the Firm's services that are rendered in connection with any calculations contemplated by this Section 6. Neither the Company, the Employer nor any parent, subsidiary, or other affiliate of the Company will have any liability to Participant for the determinations of the Firm.

7. **Conditions to Receipt of Severance Benefits**.

7.a. **Severance Benefits Release Requirement**. Notwithstanding any contrary Plan provision, as a condition to receiving any Severance Benefits, a Participant will be required to sign and not revoke a separation agreement and release of claims in a form reasonably satisfactory to the Company (the "**Severance Release**"). In all cases, the Severance Release must become effective and irrevocable no later than the sixtieth (60^{th}) calendar day following the Participant's Involuntary Termination (the "**Severance Release Deadline Date**"). If the Severance Release does not become effective and irrevocable by the Severance Release Deadline Date, the Participant will forfeit any right to receive any and all Severance Benefits. In no event will any Severance Benefits be paid or provided until the Severance Release becomes effective and irrevocable.

7.b. **Grandfathered Award Retention Acceleration Release Requirement**. Notwithstanding any contrary Plan provision, as a condition to receiving any Grandfathered Award Retention Acceleration, a Participant will be required to sign and not revoke a release of claims agreement in a form reasonably satisfactory to the Company (the "**Retention Release**"). In all cases, the Retention Release must become effective and irrevocable no later than sixty (60) days following the Retention Date (the "**Retention Release Deadline Date**"). If the Retention Release does not become effective and irrevocable by the Retention Release Deadline Date, the Participant will forfeit any right to receive any and all Grandfathered Award Retention Acceleration. In no event will any Grandfathered Award Retention Acceleration be paid or provided until the Retention Release becomes effective and irrevocable. For the avoidance of doubt, any vesting acceleration of a Grandfathered Award due to an Involuntary Termination is considered a "Severance Benefit" for purposes of the Plan and is subject to the Severance Release requirements of Section 7.1.

7.c. **Other Requirements**. A Participant's receipt of Severance Benefits will be subject to the Participant continuing to comply with the provisions of the Participant's Severance Release and the terms of any confidentiality, information and inventions agreement, and any other written agreement or agreements between the Participant and the Company (or Employer, as applicable) under which the Participant has a material duty or obligation to the Company (or Employer, as applicable). Any Severance Benefits will terminate immediately for a Participant if the Participant at any time, violates any such agreement and/or his or her Severance Release, and Participant will be obligated to repay all Severance Benefits paid or provided to the Participant.

8. **Payment Timing.**

8.a. **Severance Benefits**. Provided that a Participant's Severance Release becomes effective and irrevocable by the Severance Release Deadline Date (as defined in Section 6.1) and subject to Section 10 and the terms of the Participant's Participation Agreement, any Severance Benefits will be paid, or in the case of installments, will commence, on the sixtieth (60^{th}) day following the Participant's Involuntary Termination (the "**Payment Date**"), and any Severance Benefits otherwise payable to the Participant during the period immediately following the Participant's Involuntary Termination through the Payment Date will be paid in a lump sum to the Participant on the Payment Date, with any remaining payments to be made as provided in the Plan or the Participant's Participation Agreement, as applicable; provided, however, that any Severance Benefits consisting of the acceleration of stock options or restricted stock awards will be effective immediately upon the effectiveness and irrevocability of the Severance Release. Notwithstanding the foregoing, any Equity Awards that are restricted stock units, performance shares, performance units, and/or similar full value awards (other than restricted stock) (the "**Full Value Awards**") that accelerate vesting under Section 4 or Section 5.1 of this Agreement will be settled, subject to any delay required by Section 10 below (or the terms of the Full Value Award agreement or other Company plan, policy, or arrangement governing the settlement timing of the Full Value Award to the extent such terms specifically require any different payment timing in order to comply with or be exempt from the requirements of Section 409A, as applicable), on the Payment Date.

8.b. **Grandfathered Award Retention Acceleration**. Provided that the Retention Release becomes effective and irrevocable by the Retention Release Deadline Date, and subject to Section 10 and the terms of the Participant's Participation Agreement, any Grandfathered Award Retention Acceleration with respect to stock options or restricted stock awards will be effective immediately upon the effectiveness and irrevocability of the Retention Release. Any Full Value Awards vesting as a result of the Grandfathered Award Retention Acceleration will be settled on a date within sixty (60) days following the Retention Date (or in accordance with the terms of the Full Value Award agreement or other Company plan, policy, or arrangement governing the settlement timing of the Full Value Award to the extent such terms specifically require any different payment timing in order to comply with or be exempt from the requirements of Section 409A, as applicable).

9. **Exclusive Benefits; Non-Duplication of Benefits**.

9.a. **Prior Benefits.** The benefits, if any, provided under this Plan will be the exclusive benefits for a Participant related to his or her termination of employment with the Employer and/or a change in control of the Company and will supersede and replace any severance and/or change in control benefits and/or acceleration of vesting provisions set forth in any offer letter, employment or severance agreement, equity award agreement and/or other agreement between the Participant and the Company or the Employer (including without limitation any Participation Agreement previously entered into between the Participant and the Company), as applicable, in effect as of the date the Participant enters into a Participation Agreement. Further, for the avoidance of doubt, if at the time of becoming a Participant under the Plan, the Participant otherwise was eligible to participate in any other Company or Employer severance and/or change in control plan, program or arrangement, or under a written employment agreement or offer of employment letter between the Participant and the Company or Employer, as applicable (whether or not subject to ERISA), then participation in this Plan will supersede and replace eligibility in such other plan, program, agreement, letter or arrangement.

9.b. **Future Benefits.** In the event that, after becoming a Participant, the Participant becomes entitled to receive a Severance Benefit under this Plan and such benefit

duplicates a benefit that otherwise would be provided to the Participant under any other Company or Employer plan, program or arrangement, or under a written employment agreement or offer of employment letter between the Participant and the Company or Employer (collectively, the "**Other Plan**"), as a result of the Participant's termination of Executive's employment with the Employer, then the Participant will be entitled to receive the greater of (a) the Severance Benefit available under this Plan, and (b) the benefit available under such Other Plan.

10. **Section 409A**.

10.a. **General**. Notwithstanding anything to the contrary in this Plan or any Participation Agreement, no Deferred Payments, if any, will be paid or provided until the Participant has a "separation from service" within the meaning of Section 409A (a "**Separation from Service**"). Similarly, no Severance Benefits payable to a Participant, if any, which otherwise would be exempt from Section 409A pursuant to Treasury Regulations Section 1.409A-1(b)(9), will be payable until the Participant has a Separation from Service.

10.b. **Exemption; Compliance**. It is intended that none of the Severance Benefits will constitute Deferred Payments and that the Grandfathered Award Retention Acceleration will not constitute deferred compensation within the meaning of Section 409A, but rather that all payments and benefits under this Plan will be exempt from Section 409A as payments that would fall within the "short-term deferral period" or result from an involuntary separation from service (as defined in Section 409A), as described in Section 10.4. It also is intended that, to the extent any such Severance Benefits otherwise are not excluded from coverage under Section 409A pursuant to the exceptions in the immediately preceding sentence, they are excluded from coverage under Section 409A pursuant to the "limited payment" exception under Treasury Regulations Section 1.409A-1(b)(9)(v)(D), but only to the extent permitted by such regulation. In no event will a Participant have discretion to determine the taxable year of payment of any Deferred Payment or Grandfathered Award Retention Acceleration.

10.c. **Required Delay**. Notwithstanding any contrary Plan provision, if a Participant is a "specified employee" within the meaning of Section 409A at the time of his or her Separation from Service (other than due to death), then the Deferred Payments, if any, that are payable within the first six (6) months following such Separation from Service, will become payable on the date that is six (6) months and one (1) day following the date of such Separation from Service. Any subsequent Deferred Payment, if any, will be payable in accordance with the payment schedule applicable to such payment. Notwithstanding anything herein to the contrary, in the event of the Participant's death following his or her Separation from Service, but before the date six (6) months following such Separation from Service, then any payments delayed in accordance with this Section 10.3 will be payable in a lump sum as soon as administratively practicable after the date of the Participant's death and any other Deferred Payment will be payable in accordance with the payment schedule applicable to such payment. Each payment, installment and benefit payable under this Plan is intended to constitute a separate payment under Treasury Regulations Section 1.409A-2(b)(2).

10.d. **Certain Exemptions**. Any amount paid under this Plan that (x) satisfies the requirements of the "short-term deferral" rule set forth in Treasury Regulations Section 1.409A-1(b)(4) or (y) qualifies as a payment made as a result of an involuntary separation from service pursuant to Treasury Regulations Section 1.409A-1(b)(9)(iii) that does not exceed the limit set forth in Treasury Regulations Section 1.409A-1(b)(9)(iii)(A) will not constitute a Deferred Payment for purposes of Section 10.1. All amounts paid under this Plan will be paid to the applicable Participant as provided under the Plan and the Participant's Participation Agreement, but in no event

later than the last day of the second taxable year of the Participant following the taxable year of the Participant in which the Participant's Separation from Service occurs.

10.e. **Interpretation; Other Requirements**. The foregoing provisions are intended to comply with or be exempt from the requirements of Section 409A so that none of the Severance Benefits or Grandfathered Award Retention Acceleration to be provided under the Plan will be subject to the additional tax imposed under Section 409A, and any ambiguities and ambiguous terms herein will be interpreted to so comply or be exempt. For purposes of the Plan, to the extent required to be exempt from or comply with Section 409A, any references to Participant's Involuntary Termination or similar phrases relating to the termination of an Participant's employment will be references to his or her Separation from Service (as defined in Section 10.1). Notwithstanding any contrary Plan provision, including but not limited to Section 17, the Company, by action of the Administrator, reserves the right to amend the Plan as it deems necessary or advisable, in its sole discretion and without the consent of any Participant or other person or entity, to comply with Section 409A or to avoid income recognition under Section 409A or to otherwise avoid the imposition of additional tax under Section 409A prior to the actual payment or provision of any Severance Benefits or Grandfathered Award Retention Acceleration. In no event will Participant have any discretion to choose Participant's taxable year in which any payments or benefits are provided under this Plan. In no event will the Company, any Employer or any parent, subsidiary or other affiliate of the Company have any responsibility, liability or obligation to reimburse, indemnify or hold harmless Participant for any taxes, penalties or interest that may be imposed, or other costs that may be incurred, as a result of Section 409A.

11. **Withholdings**. The Employer and/or Company (and/or any parent, subsidiary or other affiliate of the Company, as applicable) will have the right and authority to deduct from any payments or benefits all applicable federal, state, local, and/or non-U.S. taxes or other required withholdings and payroll deductions ("Withholdings"). Prior to the payment of any amounts or provision of any benefits under this Plan, the Employer and/or Company (and/or any parent, subsidiary or other affiliate of the Company, as applicable) is permitted to deduct or withhold, or require the Participant to remit to the Company, an amount sufficient to satisfy any applicable Withholdings with respect to such payments and benefits. Neither the Company, the Employer nor any parent, subsidiary or other affiliate of the Company will have any responsibility, liability or obligation to pay the Participant's taxes arising from or relating to any payments or benefits under this Plan.

12. **Mitigation**. Further, and notwithstanding anything to the contrary in this Plan, unless specifically set forth otherwise in the Participant's Participation Agreement by specific reference to this Section 12 titled "Mitigation," if the Participant commences employment or enters into a consulting arrangement with a person or entity other than the Company or a parent or subsidiary of the Company (a "**New Employer**") during the Non-CIC Severance Period or CIC-Severance Period, as applicable (and as each is defined in the Participant's Participation Agreement), then (a) any cash compensation paid to the Participant by a New Employer during the Non-CIC Severance Period or CIC-Severance Period, as applicable, shall reduce, on a dollar-for-dollar basis, the Company's cash Severance Benefits obligations under this Plan, and (b) the Company will have no obligation to provide or pay for (or provide payments in lieu of, including any cash payments in lieu of COBRA) any type of medical, vision and dental coverage benefits that the New Employer provides to Participant. Any such reduction under the foregoing clause (a) will be applied to the Company's cash Severance Benefits obligations under this Plan in reverse chronological order of such obligations (e.g., the last scheduled Company cash Severance Benefit payment will be reduced first). If and to the extent that the amount of cash compensation paid to the Participant by a New Employer

exceed the amount of outstanding unpaid cash Severance Benefit obligations to the Participant under the Plan, Participant promptly (within ten (10) days following notice from the Company) will refund to the Company the gross amount of such excess credit, provided that in no event will the Participant be required to refund the Minimum Severance Amount (as defined below). Notwithstanding anything in this Plan or any Participation Agreement to the contrary, no reduction of the Company's Severance Benefits obligations pursuant to this Section 12 will reduce such obligations below $1,000.00 (the "**Minimum Severance Amount**"). For the avoidance of doubt, no reductions of a Participant's Severance Benefits under this Section 12 will entitle the Participant to any severance or other benefits that otherwise were superseded under Section 9. The Participant's execution of the Participant's Participation Agreement constitutes knowing written consent to the foregoing.

13. **Indebtedness of Participants.** If a Participant is indebted to the Company (or Employer, as applicable) on the date of the Participant's Involuntary Termination, the Company reserves the right to offset the payment of any Severance Benefits under the Plan by the amount of such indebtedness. Such offset shall be made only to the extent permitted under applicable laws. The Participant's execution of the Participant's Participation Agreement constitutes knowing written consent to the foregoing.

14. **Administration**. The Company is the administrator of the Plan (within the meaning of section 3(16)(A) of ERISA). The Plan will be administered, interpreted and operated by the Administrator (in its sole discretion). The Administrator will have the exclusive right and full discretion to (a) interpret the Plan, (b) designate the management or highly compensated employees of the Employer who are eligible to participate in the Plan and to provide Participation Agreements to any such Eligible Employees, (c) decide any and all matters arising under the Plan or any Participation Agreement (including the right to remedy possible ambiguities, inconsistencies, or omissions), (d) make, amend and rescind such rules as it deems necessary or appropriate for the proper administration of the Plan, and (e) make all other determinations and resolve all questions of fact necessary or advisable for the administration of the Plan, including eligibility for any benefit or payment under the Plan. Any decision made or other action taken by the Administrator (or its authorized delegates) with respect to the Plan, and any interpretation by the Administrator (or its authorized delegates) of any term or condition of the Plan (including but not limited with respect to whether an Involuntary Termination or a Change in Control has occurred), or any related document, will be final, conclusive and binding on all persons and be given the maximum possible deference allowed by law. In accordance with Section 2.1, the Administrator (a) in its sole discretion and on such terms and conditions as it may provide, may delegate in writing to one or more officers of the Company all or any portion of its authority or responsibility with respect to the Plan, and (b) has the authority to act for the Company as to any matter pertaining to the Plan. The Administrator is the appropriate named fiduciary of the Plan solely for purposes of the Plan's claims and appeal procedures set forth in Section 18.

15. **Eligibility to Participate**. To the extent that the Administrator has delegated administrative authority or responsibility to one or more officers of the Company in accordance with Sections 2.1 and 14, each such officer will not be excluded from participating in the Plan if otherwise eligible, but he or she is not entitled to act upon or make determinations regarding any matters pertaining specifically to his or her own benefit or eligibility under the Plan. The Administrator will act upon and make determinations regarding any matters pertaining specifically to the benefit or eligibility of each such officer under the Plan.

16. **Term**. The Plan will become effective upon the Effective Date and will terminate automatically upon the completion of all benefits (if any) under the terms of the Plan.

17. **Amendment or Termination**. The Company, by action of the Board or the Administrator, reserves the right to amend or terminate the Plan at any time, without advance notice (except as otherwise provided below) to any Participant or other person or entity, and without regard to the effect of the amendment or termination on any Participant or such other person or entity. Any amendment or termination of the Plan must be in writing. In addition, notwithstanding the preceding, upon, in connection with or after a Change in Control, the Company, without a Participant's written consent, may neither amend or terminate the Plan in any way nor take any other action under the Plan, which (i) prevents that Participant from becoming eligible for Severance Benefits or Grandfathered Award Retention Acceleration, or (ii) reduces or alters to the detriment of the Participant the Severance Benefits or Grandfathered Awards, if any, payable, or potentially payable, to him or her (including, without limitation, imposing additional conditions).

18. **Claims and Review Procedures**.

18.a. **General**. Any Participant who believes he or she is entitled to but has not received a benefit or payment under the Plan or disagrees with the determination of the amount of any Plan benefit or payment or any other decision regarding his or her interest under the Plan (or his or her authorized legal representative) (the "**Claimant**") must submit such claim (the "**Claim**") in writing to the Administrator at the following address within ninety (90) calendar days after the date the Claimant first knew or should have known of the facts on which the Claim is based, unless the Administrator consents otherwise in writing or ERISA provides otherwise: Seer, Inc., Plan Administrator of the Seer, Inc. Key Executive Change in Control and Severance Plan, 3800 Bridge Pkwy, Suite 102, Redwood City, CA 94065. The Claim must set forth the nature of the benefit claimed, the amount of such benefit and the basis for claiming entitlement to such benefit.

18.b. **Non-Disability Benefit Claims**.

18.2.i.**Non-Disability Benefit Claims Procedure**. If a Claimant submits a Non-Disability Benefit Claim (as defined below) to the Administrator in accordance with the requirements set forth in Section 18.1, and the Non-Disability Benefit Claim is denied (in full or in part), the Claimant will be provided a written notice of such denial within ninety (90) calendar days after the Administrator's receipt of the Non-Disability Benefit Claim, unless special circumstances require an extension of time (up to ninety (90) more calendar days), in which case written notice of the extension will be given to the Claimant within the initial ninety (90)-day review period. This notice of extension will indicate the special circumstances requiring the extension of time and the date by which the Administrator expects to render its decision on the Non-Disability Benefit Claim. The denial notice will include: (a) the specific reason(s) for the denial; (b) references to the specific Plan provision(s) on which the denial was based; (c) a description of any additional material or information that is necessary to perfect the Claim and an explanation of why such material or information is necessary; (d) a description of the Plan's procedures for appealing the denial and the time limits applicable to such procedures; (e) a statement regarding the Claimant's right to bring a civil action under Section 502(a) of ERISA following an adverse benefit determination on appeal pursuant to the Plan's procedures; and (f) any other information required by ERISA. A "**Non-Disability Benefit Claim**" means a Claim that does not involve any determination of Disability by the Administrator.

18.2.ii.**Appeal Procedure**. A Claimant may appeal a denied Non-Disability Benefit Claim by filing a request for review of such denial in writing with the Administrator at the address noted in Section 18.1. Such request must be made no later than sixty (60) calendar days following the date the Claimant received the written notice of denial or such later deadline as may be prescribed by ERISA. The Claimant then has the right to review and obtain copies of all documents and other information relevant to the Non-Disability Benefit Claim, upon written request and at no charge, and to submit comments, documents and other information relating to such Claim in writing. If the Claimant files a timely appeal, as described above, the Administrator will provide written notice of its decision on review (whether or not adverse) within sixty (60) calendar days after it received the timely request for review, unless special circumstances require a longer period of time, in which case a decision will be rendered as soon as possible, but not later than one hundred and twenty (120) calendar days after receipt of the timely review request. The Claimant will be given written notice of any such extension before the end of the original 60-day review period, as well as the special circumstances requiring the extension of time and the date by which the Administrator expects to render its decision. If the Administrator denies the appealed Non-Disability Benefit Claim, the notice of denial will include: (a) the specific reason(s) for the denial; (b) references to the specific provision(s) of the Plan on which the denial was based; (c) a statement that the Claimant will be provided, upon request and free of charge, reasonable access to, and copies of, all documents and other information relevant to such Claim; (d) a statement regarding the Claimant's right to bring a civil action under Section 502(a) of ERISA following the denial on review pursuant to the Plan's procedures; and (e) any other information required by ERISA.

18.c. **Disability Benefit Claims**.

18.3.i.**Disability Benefit Claims Procedure**. If a Claimant submits a Disability Benefit Claim (as defined below) to the Administrator in accordance with the requirements set forth in Section 18.1, and the Disability Benefit Claim is denied (in full or in part), the Claimant will be provided a written notice of such denial within forty-five (45) calendar days after the Administrator's receipt of the Disability Benefit Claim. However, this forty-five (45)-day time period may be extended for up to thirty (30) more calendar days for matters beyond the control of the Administrator, in which case the Claimant will be notified in writing of the extension of time before the end of the initial forty-five (45)-day review period. This notice of extension will indicate the circumstances requiring the extension of time and the date by which the Administrator expects to render its decision on the Disability Benefit Claim. If, before the end of the first thirty (30)-day extension period, the Administrator determines that, due to matters beyond its control, a decision cannot be rendered within that extension period, then the period for making the determination may be extended for up to thirty (30) more calendar days, in which case the Claimant will be notified in writing of the additional extension of time before the end of the initial thirty (30)-day extension period. This notice of extension will indicate the circumstances requiring the additional extension of time and the date by which the Administrator expects to render its decision on the Disability Benefit Claim. Any notice of extension also will explain the standards on which entitled to the applicable benefit is based, the unresolved issues that prevent a decision on the Disability Benefit Claim, the additional information needed to resolve those issues, and notice that the Claimant will be afforded at least forty-five (45) calendar days within which to provide the specified information.

The denial notice will include: (a) the specific reason(s) for the denial; (b) references to the specific Plan provision(s) on which the denial was based; (c) a description of any additional material or information that is necessary to perfect the Disability Benefit Claim and an explanation of why such material or information is necessary; (d) a statement that the Claimant will

be provided, upon request and free of charge, reasonable access to and copies of, all documents and other information relevant to the Disability Benefit Claim; (e) a description of the Plan's procedures for appealing the denial and the time limits applicable to such procedures; (f) a statement regarding the Claimant's right to bring a civil action under Section 502(a) of ERISA following an adverse benefit determination on appeal pursuant to the Plan's procedures, including a description of the contractual limitations period that applies to bringing such action, as well as the calendar date on which the contractual limitations period expires; (g) a copy of any internal rule, guideline, protocol or other similar criteria relied on in denying the Disability Benefit Claim or a statement that such rule, guideline, protocol or other similar criteria do not exist; (h) a discussion of the Administrator's decision, including an explanation of the Administrator's basis for disagreeing with, or not following, as applicable: (1) the views of the Claimant's treating health care professionals and/or vocational experts who evaluated the Claimant, if provided by the Claimant, (2) the views of medical and/or vocational experts whose advice was obtained on behalf of the Plan in connection with the denial, without regard to whether the Administrator relied upon such advice in making the benefit determination, and (3) the federal Social Security Administration's determination of disability, if provided by the Claimant; and (i) any other information required by ERISA. A "**Disability Benefit Claim**" means a Claim that involves a determination of Disability by the Administrator.

18.3.ii.**Appeal Procedure**. A Claimant may appeal a denied Disability Benefit Claim by filing a request for review of such denial in writing with the Administrator at the address noted in Section 18.1. Such request must be made no later than one hundred eighty (180) calendar days following the date the Claimant received the written notice of denial or such later deadline as may be prescribed by ERISA. The Claimant then has the right to review and obtain copies of all documents and other information relevant to the Disability Benefit Claim, upon written request and at no charge, and to submit comments, documents and other information relating to such Claim in writing. If the Claimant files a timely appeal, as described above, the Administrator will provide written notice of its decision on review (whether or not adverse) within forty-five (45) calendar days after it received the timely request for review, unless special circumstances require a longer period of time, in which case a decision will be rendered as soon as possible, but not later than ninety (90) calendar days after receipt of the timely review request. The Claimant will be given written notice of any such extension before the end of the original 45-day review period, as well as the special circumstances requiring the extension of time and the date by which the Administrator expects to render its decision. Before any denial on review may be issued, however, the Administrator will provide the Claimant, free of charge, with any new or additional evidence considered, relied upon or generated in connection with the Disability Benefit Claim. Moreover, before any denial on review based on a new or additional rationale may be issued, the Administrator will provide the Claimant, free of charge, with such rationale. Any evidence or rationale will be provided as soon as possible and sufficiently in advance of the date when the Administrator must issue its decision on review to give the Claimant a reasonable opportunity to respond before that date. The review of the appealed Disability Benefit Claim will be conducted by the Administrator (who will not be the individual who decided the initial Disability Benefit Claim nor the subordinate of such individual). In deciding an appeal of any denied Disability Benefit Claim that is based in full or in part on a medical judgment, the Administrator will consult with a health care professional (who will neither be an individual who was consulted in connection with the initial Disability Benefit Claim nor the subordinate of such individual) who has appropriate training and experience in the field of medicine involved in the medical judgment. Any medical or vocational experts whose advice was obtained on behalf of the Administrator in connection with such denied Claim will be identified, regardless of whether the advice was relied upon in denying the Disability Benefit Claim.

If the Administrator denies the appealed Disability Benefit Claim, the denial notice will include: (a) the specific reason(s) for the denial; (b) references to the specific provision(s) of the Plan on which the denial was based; (c) a statement that the Claimant will be provided, upon request and free of charge, reasonable access to, and copies of, all documents and other information relevant to the Disability Benefit Claim; (d) a copy of any internal rule, guideline, protocol or other similar criteria relied on in denying the Disability Benefit Claim or a statement that such rule, guideline, protocol or other similar criteria do not exist; (e) a discussion of the Administrator's decision, including an explanation of the Administrator's basis for disagreeing with, or not following, as applicable: (1) the views of the Claimant's treating health care professionals and/or vocational experts who evaluated the Claimant, if provided by the Claimant, (2) the views of medical and/or vocational experts whose advice was obtained on behalf of the Plan in connection with the denial, without regard to whether the Administrator relied upon such advice in making the benefit determination, and (3) the federal Social Security Administration's determination of disability, if provided by the Claimant; (f) a statement regarding the Claimant's right to bring a civil action under Section 502(a) of ERISA following an adverse benefit determination on appeal pursuant to the Plan's procedures, including a description of the contractual limitations period that applies to bringing such action, as well as the calendar date on which the contractual limitations period expires; and (g) any other information required by ERISA.

If the Administrator does not strictly adhere to the Plan's claims and appeal procedures for Disability Benefit Claims, as set forth in this Section 18.3 (the "Disability Claim Procedures"), the Claimant may be deemed to have exhausted the Plan's administrative remedies and may be able to seek judicial review of the Claimant's Disability Benefit Claim. Such deemed exhaustion does not apply, however, if the Administrator's failure to strictly adhere to the Disability Claim Procedures was a de minimis violation not likely to cause prejudice or harm to the Claimant and if the other applicable requirements under ERISA are met. The Claimant may request a written explanation of such a violation from the Administrator. Within ten (10) calendar days of the Claimant's request, the Administrator will provide such explanation, including a specific description of the bases, if any, for asserting that the violation should not cause the Disability Claim Procedures to be deemed exhausted. A Disability Benefit Claim rejected by a court for immediate review based on deemed exhaustion will be considered refiled under the Plan upon the Plan's receipt of the court's decision. Within a reasonable time after receipt of the court's decision, the Administrator will provide the Claimant with notice of the Disability Benefit Claim's resubmission.

18.d. **COVID-19**. Notwithstanding the foregoing, the sixty (60)-day period following the announced end of the COVID-19 U.S. national emergency or such other date announced by the Internal Revenue Service and the Employee Benefits Security Administration in a future notification will be disregarded for any Claimant in determining the date by which the Claimant may file a Claim or file an appeal of an adverse benefit determination under the Plan

18.e. **Exhaustion of Plan's Claims and Appeal Procedure Required; Limitations on any Legal Actions; Venue**. Exhaustion of the Plan's applicable claims and appeal procedure set forth in this Section 18 is mandatory for resolving any Claim under the Plan before initiating any legal action relating to the Claim. Any legal action with respect to a Claim, if permitted, must be brought (a) no later than one (1) year after the Administrator's denial of such Claim on appeal, regardless of any state or federal statutes establishing provisions relating to limitations on actions, and (b) in the U.S. District Court for the Northern District of California. In any such action, all determinations made by the Administrator (and its authorized delegates) in

connection with its review of the Claim will be afforded the maximum possible deference permitted by law.

19. **Attorneys' Fees**. The parties will each bear their own expenses, legal fees and other fees incurred in connection with this Plan.

20. **Source of Payments**. The Plan will be maintained at all times in a manner to be considered "unfunded" for purposes of ERISA. Any Severance Benefits or Grandfathered Award Retention Acceleration will be paid from the general funds of the Company; no separate fund will be established under the Plan, and the Plan will have no assets. No right of any person to receive any payment or benefit under the Plan will be any greater than the right of any other general unsecured creditor of the Company, the Employer or any other parent, subsidiary or affiliate of the Company.

21. **No Guarantee of Tax Consequences.** Participants (or their beneficiaries) solely will be responsible for any and all taxes with respect to any payments or benefits provided under the Plan. None of the Administrator, the Company, the Employer or any parent, subsidiary or other affiliate of the Company makes any guarantees regarding the tax treatment to any person of any payments or benefits provided under the Plan.

22. **Inalienability**. In no event may any current or former employee of any Employer sell, transfer, anticipate, assign or otherwise dispose of any right or interest under the Plan, except as provided in this Section. Any other attempted assignment, transfer, conveyance, or other disposition of a Participant's right to compensation or other benefits will be null and void. At no time will any of a Participant's rights or interests under the Plan be subject to the claims of creditors nor liable to attachment, execution or other legal process. If any payments or benefits are payable to a Participant who is unable to care for his or her affairs, payment may be made directly to his or her legal guardian or personal representative.

23. **Death**. Notwithstanding anything to the contrary in the Plan, if a Participant dies after his or her Involuntary Termination and after the Participant (or the authorized representative of the Participant's estate) have timely executed and returned the Severance Release or the Retention Release, as applicable, to the Administrator (without having timely revoked it) but before receiving all of the payments and benefits otherwise payable to him or her, such remaining payments and benefits instead will be paid to the executor of the Participant's estate, on behalf of the estate, at the time(s) and in the form(s) applicable to such payments and benefits, as applicable, under the Plan.

24. **No Enlargement of Employment Rights**. Neither the establishment or maintenance or amendment of the Plan, nor the making of any benefit payment hereunder, will be construed to confer upon any individual any right to continue to be an employee of the Company, the Employer or any parent, subsidiary or other affiliate of the Company. The Company and the applicable Employers expressly reserve the right to discharge any of their employees at any time and for any reason, with or without cause or notice, as permitted by applicable law. However, as described in the Plan, a Participant may be entitled to benefits under the Plan depending upon the circumstances of the termination of his or her employment.

25. **Successors**. Any successor to the Company of all or substantially all of the Company's business and/or assets (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or other transaction) will assume the obligations under the Plan and agree expressly to perform the obligations under the Plan in the same manner and to the same extent as the

Company would be required to perform such obligations in the absence of a succession. For all purposes under the Plan, the term "Company" will include any successor to the Company's business and/or assets which become bound by the terms of the Plan by operation of law, or otherwise.

26. **Applicable Law**. The Plan is intended to be an unfunded deferred compensation plan within the meaning of U.S. Department of Labor Regulations Section 2520.104-23 and will be construed, administered and enforced as such in accordance with ERISA. The provisions of the Plan will be construed, administered and enforced in accordance with ERISA and, to the extent applicable, the internal substantive laws of the State of California (but not its conflict of laws provisions).

27. **Severability**. If any provision of the Plan is held invalid or unenforceable, its invalidity or unenforceability will not affect any other provision of the Plan, and the Plan will be construed and enforced as if such provision had not been included.

28. **Headings**. Headings in this Plan document are for purposes of reference only and will not limit or otherwise affect the meaning, construction or interpretation of the Plan's provisions.

29. **Indemnification**. The Company hereby agrees to indemnify and hold harmless the officers and employees of the Company, and the members of the Board, from all losses, claims, costs or other liabilities arising from their acts or omissions in connection with the administration, amendment or termination of the Plan, to the maximum extent permitted by applicable law. This indemnity will cover all such liabilities, including judgments, settlements and costs of defense. The Company will provide this indemnity from its own funds to the extent that insurance does not cover such liabilities. This indemnity is in addition to and not in lieu of any other indemnity provided to such person by the Company.

30. **Protected Activity**. Notwithstanding any contrary provision of the Plan or of the Severance Release or the Retention Release, nothing in this Plan, the Severance Release or the Retention Release shall prohibit or impede Participant from engaging in any Protected Activity. For purposes of this Plan, "**Protected Activity**" shall mean (i) filing and/or pursuing a charge or complaint with, or otherwise communicating or cooperating with or participating in any investigation or proceeding that may be conducted by, any federal, state or local government agency or commission, including the Securities and Exchange Commission, the Equal Employment Opportunity Commission, the Occupational Safety and Health Administration, and the National Labor Relations Board ("**Government Agencies**"); (ii) discussing the terms, wages, and working conditions of their employment among employees, as protected by applicable law; (iii) disclosing information pertaining to sexual harassment or any unlawful or potentially unlawful conduct, as protected by applicable law. Notwithstanding the foregoing, the Participant agrees to take all reasonable precautions to prevent any unauthorized use or disclosure of any information that may constitute Company confidential information (as defined in the At-Will Employment, Confidential Information, and Invention Assignment Agreement entered into between the Company and the Participant (the "**Proprietary Agreement**") or any other agreement between the Participant and the Company, the Employer or any parent, subsidiary or other affiliate of the Company relating to the protection of confidential information) in a manner not protected by applicable law (each, a "**Confidentiality Agreement**"). The Participant further understands that Protected Activity does not include disclosure of any Company attorney-client privileged communications or attorney work product. Any language in the Proprietary Agreement or any Confidentiality Agreement that conflicts with, or is contrary to, this paragraph is superseded by this Plan. The Participant understands and acknowledges that pursuant to the Defend Trade Secrets Act of 2016 (A) an

individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that is made (i) in confidence to a Federal, state, or local government official or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, or (ii) in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal and (B) an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual files any document containing the trade secret under seal, and does not disclose the trade secret, except pursuant to court order.

* * *

Appendix A
FORM OF

SEER, INC.
KEY EXECUTIVE CHANGE IN CONTROL AND SEVERANCE PLAN

PARTICIPATION AGREEMENT

Seer, Inc. (the "**Company**") is pleased to inform you, **[NAME]**, that you have been selected to participate in the Company's Key Executive Change in Control and Severance Plan (the "**Plan**"). A copy of the Plan has been delivered to you with this Participation Agreement. Your participation in the Plan is subject to all of the terms and conditions of the Plan, including this Participation Agreement.

In order to actually become a Participant in the Plan, as described in the Plan, you must complete and sign this Participation Agreement and return it to **[NAME]** by no later than **[DATE]**.

The Plan describes in detail certain circumstances under which you, if you are a Participant in the Plan, may become eligible for Severance Benefits and certain other benefits enumerated hereunder. Any capitalized term used in this Participation Agreement that is not otherwise defined herein will have the meaning ascribed to such term in the Plan.

As described more fully in the Plan, if you are a Participant in the Plan, you may become eligible for certain Severance Benefits under Section 4.1 of the Plan if, during the Change in Control Period, either (a) your Employer terminates your employment for a reason other than (x) Cause (as defined in Exhibit A attached hereto and made a part of this Participation Agreement), (y) your death, or (z) your Disability or (b) you terminate your employment with your Employer as a result of a Good Reason Termination (as defined in Exhibit A attached hereto and made a part of this Participation Agreement).

In addition (but in lieu of the Severance Benefits described in the immediately preceding paragraph), and as described more fully in the Plan, if you are a Participant in the Plan, you may become eligible for certain Severance Benefits under Section 4.2 of the Plan if [your Employer terminates your employment for a reason other than (x) Cause, (y) your death, or (z) your Disability, and such termination does not occur during the Change in Control Period.] OR **[*C-Suite (consisting of President/COO, CFO and GC) and any others as determined by Administrator only:*** either (a) your Employer terminates your employment for a reason other than (x) Cause, (y) your death, or (z) your Disability, or (b) you terminate your employment with the Employer as a result of a Good Reason Termination, and in each case, such termination does not occur during the Change in Control Period.**]**

[*Include only if Participant has outstanding awards granted prior to IPO:* Further, as described more fully in the Plan, you may become eligible for certain vesting acceleration benefits related to "Grandfathered Awards" under Section 5 of the Plan.**]**

A. Involuntary Termination of Employment Not During the Change in Control Period.

In the event of an Involuntary Termination that occurs under the circumstance**[**s**]** described in Section **[*Add for C-Suite and any others as determined by Administrator who have a "Good***

Reason" trigger outside the CIC context: 4.2 of the Plan in subclause (a) or (b) (that is, (a) the Employer terminates your employment for a reason other than (x) Cause, (y) your death, or (z) your Disability and such termination does not occur during the Change in Control Period), or (b) you terminate your employment with the Employer due to a Good Reason Termination and such termination does not occur during the Change in Control Period)**] OR [*Add for SVPs, VPs and any others as determined by Administrator who do NOT have a "Good Reason" trigger outside the CIC context:*** 4.2(a) of the Plan (that is, the Employer terminates your employment for a reason other than (x) Cause, (y) your death, or (z) your Disability and such termination does not occur during the Change in Control Period)**]**, then subject to the terms and conditions of the Plan (including the Severance Release requirement under the Plan), you will receive the following Severance Benefits:

1. **Cash Severance Benefits**. As described in Section 4.2.1 of the Plan, continuing payments of your Monthly Base Salary during the Non-CIC Severance Period (as defined in Exhibit A attached to and made a part of this Participation Agreement), payable in accordance with your Employer's standard payroll procedures;

2. **COBRA Benefit**. If you and any Family Members have Qualifying Health Coverage (as defined in Section 4.1.2 of the Plan), and subject to the terms and conditions of Section 4.2.2 of the Plan, COBRA Benefits for the number of months in your Non-CIC Severance Period or until you have secured other employment that provides group health insurance coverage, whichever occurs first.

3. **No Equity Award Vesting Acceleration Benefit**. For the avoidance of doubt, you will not be entitled to any Equity Award vesting acceleration benefit under the Plan.

B. Involuntary Termination of Employment During the Change in Control Period.

In the event of an Involuntary Termination that occurs under the circumstances described in Section 4.1 of the Plan in subclause (a) or (b) (that is, (a) the Employer terminates your employment for a reason other than (x) Cause, (y) your death, or (z) your Disability and such termination occurs during the Change in Control Period), or (b) you terminate your employment with the Employer due to a Good Reason Termination and such termination occurs during the Change in Control Period), and as described in Section 4.1.1 of the Plan, then subject to the terms and conditions of the Plan (including the Severance Release requirement under the Plan), you will receive the following Severance Benefits:

1. **Cash Severance Benefits**.

a. Continuing payments of your Monthly Base Salary during the CIC Severance Period (as defined in Exhibit A attached to and made a part of this Participation Agreement), payable in accordance with your Employer's standard payroll procedures; and

b. A lump sum cash payment in an aggregate amount equal to **[*Add for C-Suite and any others as determined by Administrator:*** one hundred percent (100%)] **OR [*Add for (i) VPs who were designated as Eligible Employees at the VP level of benefits prior to the February 2022 Restatement Date, (ii) SVPs, and (iii) any others as determined by Administrator:*** seventy-five percent (75%)**] OR [*Add for VPs designated as Eligible Employees at the VP level of benefits on or after the February 2022 Restatement Date, and***

any others as determined by Administrator: fifty percent (50%)**]** of your Target Bonus, will be paid as set forth in the Plan.

2. **COBRA Benefit**. If you and any Family Members have Qualifying Health Coverage (as defined in Section 4.1.2 of the Plan), and subject to the terms and conditions of Section 4.1.2 of the Plan, COBRA Benefits for the number of months in your CIC Severance Period or until you have secured other employment that provides group health insurance coverage, whichever occurs first.

3. **Equity Award Vesting Acceleration Benefit**. One hundred percent (100%) of your then unvested and outstanding Time-based Equity Awards will vest in full and be free of restrictions related to the exercisability or vesting thereof.

[*Include only if Participant has outstanding awards granted prior to IPO and if intended to apply to such Participant:*
C. Grandfathered Awards.

1. **Involuntary Termination**. If, during the time period beginning upon the consummation of a Change in Control and ending on the date immediately prior to your Retention Date (as described below), either (a) your Employer terminates your employment for a reason other than (x) Cause, (y) your death, or (z) your Disability, or (b) you terminate your employment with your Employer due to a Good Reason Termination, then, subject to the Severance Release requirement under the Plan, one hundred percent (100%) of your then unvested and outstanding Grandfathered Awards (that do not vest pursuant to Section B, above) will vest in full and be free of restrictions related to the exercisability or vesting thereof; and

2. **Employment Through 2-year Anniversary of Change in Control**. If you remain employed with the Company, your Employer or a parent or subsidiary of the Company from the Effective Date through the Retention Date, then subject to the Retention Release becoming effective and irrevocable no later than Retention Release Deadline Date, one hundred percent (100%) of your then unvested and outstanding Grandfathered Awards will vest in full and be free of restrictions related to the exercisability or vesting thereof. For purposes of the Plan and this Participation Agreement, your Retention Date is the two (2) year anniversary of the Change in Control.**]**

Severance Release Requirement. In order to receive any Severance Benefits for which you otherwise become eligible under the Plan, you must sign and deliver to the Administrator the Severance Release, which must become effective and irrevocable within the requisite period set forth in the Severance Release and is subject to the Severance Release timing requirements specified in the Plan.

Golden Parachute Tax Reduction. Also, as explained in the Plan, your Severance Benefits (if any) and Grandfathered Award Retention Acceleration (if any) will be reduced if necessary to avoid the Severance Benefits and Grandfathered Award Retention Acceleration from becoming subject to "golden parachute" excise taxes under the Internal Revenue Code.

Please note that your Employer has the right to withhold from any Severance Benefits and any Grandfathered Award Retention Acceleration any applicable U.S. federal, state, local and non-U.S. taxes required to be withheld and any other required payroll deductions.

By your signature below, you agree and acknowledge that any Severance Benefits you receive or may receive under the Plan are subject to the provisions of the "Mitigation" section (Section 12) of the Plan, and you agree to inform the Company promptly in writing if you commence employment or enter into a consulting arrangement with a New Employer (as defined in the Plan) while you are receiving Severance Benefits under the Plan.

By your signature below, you and the Company agree that your participation in the Plan is governed by this Participation Agreement and the provisions of the Plan. Your signature below confirms that: (1) you have received a copy of the Seer, Inc. Key Executive Change in Control and Severance Plan; (2) you have carefully read this Participation Agreement and the Plan, including, but not limited to, the terms and conditions for participation in, and receipt of any Severance Benefits and any Grandfathered Award Retention Acceleration, under the Plan; and (3) the decisions and determinations by the Administrator under the Plan will be final and binding on you and your successors, and will be given the maximum possible deference permitted by law.

SEER, INC. **[NAME OF ELIGIBLE EMPLOYEE]**

Signature	Signature
Name	Date
Title	

Attachment: Seer, Inc. Key Executive Change in Control and Severance Plan

<u>Exhibit A</u> to the
Seer, Inc.
Key Executive Change in Control and Severance Plan
Participation Agreement for

[NAME OF ELIGIBLE EMPLOYEE]

1. "**Cause**" **Definition**. For the purposes of the Plan and the Participation Agreement, "**Cause**" means:

(a) your failure to *[For C-Suite add:* significantly*]* perform your assigned duties or responsibilities as an employee (other than a failure resulting from your Disability) after written notice thereof from the Company describing your failure to *[For C-Suite add:* significantly*]* perform such duties or responsibilities and provided that such failure has not been cured within *[For C-Suite add:* thirty (30)*] [For SVP or VP add*: ten (10)*]* days after the date the Company's gives such written notice; (b) your engaging in any act of dishonesty, fraud or misrepresentation with respect to the Company; (c) your violation of any federal or state law or regulation applicable to the business of the Company or its affiliates; (d) your breach of any confidentiality agreement or invention assignment agreement between you and the Company (or any affiliate of the Company); (e) your *[For C-Suite add:* material*]* breach of your employment agreement with the Company or any other agreement between you and the Company *[For C-Suite add:* and failure to cure such breach (if capable of cure) within ten (10) days after the Company gives written notice to you regarding such breach*]*; (f) your being convicted of, or entering a plea of guilty or nolo contendere to, any *[For C-Suite add:* felony or crime of moral turpitude*] [For SVP or VP add*: crime]; or (g) your willful misconduct which *[For C-Suite add:* significantly and*]* adversely reflects upon the business, operations, or reputation of the Company, which misconduct has not been cured (or cannot be cured) within ten (10) days after the Company gives written notice to you regarding such misconduct. For purposes of clarity, the termination of your employment due to death or Disability is not, by itself, deemed to be a termination by the Company other than for Cause.

2. "**CIC Severance Period**" **Definition**. For the purposes of the Plan and this Participation Agreement, "**CIC Severance Period**" means the period of time commencing immediately after the termination of your employment with the Employer through the date that is ***[Add C-Suite and any others as determined by Administrator:*** twelve (12) months following such termination date.] ***[Add for (i) VPs who were designated as Eligible Employees at the VP level of benefits prior to the February 2022 Restatement Date, (ii) SVPs, and (iii) any others as determined by Administrator:*** nine (9) months following such termination date.] ***[Add for designated as Eligible Employees at the VP level of benefits on or after the February 2022 Restatement Date and any others as determined by Administrator:*** six (6) months following such termination date.]

3. "**Good Reason Termination**" **Definition**. For the purposes of the Plan and the Participation Agreement, "**Good Reason Termination**" means: your voluntary termination of your employment with the Company after one or more of the following is undertaken (through a single action or series of actions) without your written consent: (a) a material reduction by the Company in your then-current annual base salary as compared to your base salary in effect immediately prior to such reduction; or (b) a material change in the geographic location of your primary work facility or location; provided, that a relocation of fifty (50) miles or less from your then present location or to your home as your primary work location will not be considered a material change in geographic location *[for President/COO, CFO and GC only, add:* ; or (c) a material reduction of your authority,

duties or responsibilities, unless you are provided with a comparable position*]*. To the extent your primary work facility or location is not the Company's corporate offices or facilities due to a shelter-in-place order, quarantine order, or similar work-from-home requirement that applies to you, your primary work location, from which a change in location under the foregoing clause (b) will be measured, will be considered the Company's office or facility location where your employment with the Company primarily was based immediately prior to the commencement of such shelter-in-place order, quarantine order, or similar work-from-home requirement. An event or action will not give you grounds to terminate your employment as a Good Reason Termination unless (i) you give the Company written notice within sixty (60) days after you know or should know of the initial existence of such event or action, (ii) such event or action is not reversed, remedied or cured, as the case may be, by the Company as soon as possible but in no event later than thirty (30) days of receiving such written notice from you (the "**Cure Period**"), and (iii) you terminate your employment within sixty (60) days following the end of the Cure Period.

4. "**Non-CIC Severance Period**" **Definition**. For the purposes of the Plan and this Participation Agreement, "**Non-CIC Severance Period**" means the period of time commencing immediately after the termination of your employment with the Employer through the date that is ***[Add C-Suite and any others as determined by Administrator:*** nine (9) months following such termination date.] ***[Add for (i) VPs who were designated as Eligible Employees at the VP level of benefits prior to the February 2022 Restatement Date, (ii) SVPs, and (iii) any others as determined by Administrator:*** three (3) months plus an additional one (1) month for every fully completed Year of Service in excess of three (3) Years of Service; provided, however, that in all cases, the Severance Period will end no later than six (6) months following your termination date.] ***Add for VPs designated as Eligible Employees at the VP level of benefits on or after the February 2022 Restatement Date, and any others as determined by Administrator:*** three (3) months]

5. ***[Add for SVPs, VPs and any others as determined by Administrator:*** "**Year of Service**"**_Definition**. For the purposes of the Plan and this Participation Agreement "**Year of Service**" means the twelve (12)-month period measured from your initial start date with the Company or any Employer, provided, however, if you previously left employment with the Company and all Employers and returned to employment with the Company or an Employer, this will be measured from your most recent employment return date.]

Ex. 31.1

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

I, Omid Farokhzad, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Seer, 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.

Ex. 31.1

Date: November 7, 2023

By: /s/ Omid Farokhzad
Omid Farokhzad
Chief Executive Officer, President and Chair of the Board of Directors
(Principal Executive Officer)

Ex. 31.2

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

I, David Horn, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Seer, 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.

Ex. 31.2

Date: November 7, 2023

By: /s/ David Horn
David Horn
Chief Financial Officer
(Principal Financial and Accounting Officer)

Ex. 32.1

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

In connection with the Quarterly Report of Seer, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Omid Farokhzad, hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 7, 2023

By: /s/ Omid Farokhzad
Omid Farokhzad
Chief Executive Officer, President and Chair of the Board of Directors
(Principal Executive Officer)

Ex. 32.2

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

In connection with the Quarterly Report of Seer, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David Horn, hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 7, 2023

By: /s/ David Horn
David Horn
Chief Financial Officer
(Principal Financial Officer and Accounting Officer)