

---

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

---

**FORM 10-Q**

---

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

For the quarterly period ended September 30, 2021

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: 001-40443

**SINGULAR GENOMICS SYSTEMS, INC.**

(Exact name of Registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

81-2948451  
(I.R.S. Employer  
Identification Number)

10931 N. Torrey Pines Road, Suite #100  
La Jolla, California 92037  
(858) 333-7830

(Registrant's address of principal executive offices  
and telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$0.0001 par value per share	OMIC	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, 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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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 7(a)(2)(B) of the Securities Act.

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

72,058,523 shares of common stock, \$0.0001 par value, outstanding as of October 31, 2021.

---

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This filing contains forward-looking statements. All statements other than statements of historical facts contained in this report, including statements regarding our future results of operations and financial position, future revenue, business strategy, prospects, products, 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.

The words “anticipate,” “believe,” “contemplate,” “continue” “could,” “estimate,” “expect,” “intend,” “may,” “might,” “plan,” “potential” “predict,” “project,” “should,” “target,” “will” or “would” or the negative of these terms or other similar expressions are intended to identify forward looking statements. Forward-looking statements contained in this report include, but are not limited to, statements about:

- estimates of our addressable market, market growth, future revenue, expenses, capital requirements and our needs for additional financing;
- our ability to successfully implement our commercialization plan for our G4 Integrated Solution and planned PX Integrated Solution;
- the implementation of our business model and strategic plans for our G4 Integrated Solution and planned PX Integrated Solution;
- our expectations regarding the rate and degree of market acceptance of our G4 Integrated Solution and planned PX Integrated Solution;
- our ability to compete with competitive companies and technologies in our industry;
- our ability to manage and grow our business and commercialize our G4 Integrated Solution and planned PX Integrated Solution;
- our ability to develop and commercialize new products and development product enhancements;
- the impact of the COVID-19 pandemic on our business;
- 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;
- our ability to effectively manufacture our products;
- the potential effects of government regulation;
- our ability to hire and retain key personnel and to manage our future growth effectively;
- our ability to obtain additional financing on favorable terms to us or at all;
- our expectations regarding use of proceeds from our initial public offering;
- the impact of local, regional, national and international economic conditions and events;
- our expectations about market trends; and
- our expectations regarding the period during which we will qualify as an emerging growth company under the JOBS Act.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in the section titled “Risk Factors” elsewhere in this report. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this report may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely on forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, advancements, discoveries, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, except as required by law, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this report to conform these statements to actual results or to changes in our expectations.

You should read this report and the documents that we reference in this report and have filed with the SEC as exhibits to this report with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

---

## Summary of Material Risks Associated with Our Business

Our business is subject to a number of risks that if realized could materially affect our business, prospects, operating results and financial condition. These risks are discussed more fully in the “Risk Factors” section of this Quarterly Report on Form 10-Q. These risks include the following:

- ☐ Our limited operating history makes it difficult to evaluate our future prospects and the risks and challenges we may encounter.
  - ☐ We have incurred significant losses since inception, we expect to incur significant losses in the future and we may not be able to generate sufficient revenue to achieve and maintain profitability.
  - ☐ We are a pre-revenue life science technology company in the development stage and have no history commercializing our products or technology, which makes it difficult to evaluate our prospects and predict our future performance.
  - ☐ The life sciences technology market is highly competitive. If we fail to compete effectively, our business and operating results will suffer.
  - ☐ If we are sued for infringing, misappropriating or otherwise violating intellectual property rights of third parties, such litigation could be costly and time consuming and could prevent or delay us from developing or commercializing our product candidates.
  - ☐ If our products fail to achieve early customer and scientific acceptance, we may not be able to achieve broader market acceptance for our products, and our revenues and prospects may be harmed.
  - ☐ We expect to be highly dependent on revenue generated from the sale of our G4 Integrated Solution, and any delay or failure by us to finalize the development and to begin to commercialize our G4 Integrated Solution will have a substantial adverse effect on our business and results of operations.
  - ☐ The COVID-19 pandemic and efforts to reduce its spread have adversely impacted and may materially and adversely impact our business and operations in the future.
  - ☐ Our business will depend significantly on research and development spending by academic institutions and other research institutions, and any reduction in spending could limit demand for our products and adversely affect our business, results of operations, financial condition and prospects.
  - ☐ 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.
  - ☐ We have not commercially launched any products, and we may not be able to successfully commercially launch our G4 Integrated Solution or planned PX Integrated Solution as planned.
  - ☐ 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.
  - ☐ We may require substantial additional funding, which may not be available to us on acceptable terms, or at all, and, if not available, may require us to delay, scale back, or cease our product development programs or operations.
-

**TABLE OF CONTENTS**

<a href="#">Part I. Financial Information</a>	2
<a href="#">Item 1. Financial Statements (Unaudited)</a>	2
<a href="#">Condensed Balance Sheets</a>	2
<a href="#">Condensed Statements of Operations</a>	3
<a href="#">Condensed Statements of Comprehensive Loss</a>	4
<a href="#">Condensed Statements of Preferred Stock and Stockholders' Equity (Deficit)</a>	5
<a href="#">Condensed Statements of Cash Flows</a>	7
<a href="#">Notes to Condensed Financial Statements</a>	8
<a href="#">Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</a>	22
<a href="#">Item 3. Quantitative and Qualitative Disclosures about Market Risk</a>	32
<a href="#">Item 4. Controls and Procedures</a>	32
<a href="#">Part II. Other Information</a>	34
<a href="#">Item 1. Legal Proceedings</a>	34
<a href="#">Item 1A. Risk Factors</a>	35
<a href="#">Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</a>	68
<a href="#">Item 3. Defaults Upon Senior Securities</a>	68
<a href="#">Item 4. Mine Safety Disclosures</a>	68
<a href="#">Item 5. Other Information</a>	68
<a href="#">Item 6. Exhibits</a>	69
<a href="#">Signatures</a>	70

---

## PART I. FINANCIAL INFORMATION

## Item 1. Financial Statements

**SINGULAR GENOMICS SYSTEMS, INC.**  
**Condensed Balance Sheets**  
(In thousands, except share and par value amounts)

	September 30, 2021 (Unaudited)	December 31, 2020
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 239,263	\$ 11,688
Short-term investments	117,750	15,231
Prepaid expenses and other current assets	7,214	652
Total current assets	364,227	27,571
Property and equipment, net	4,917	2,368
Restricted cash	687	482
Other noncurrent assets	1,000	81
Total assets	\$ 370,831	\$ 30,502
<b>Liabilities, Convertible Preferred Stock and Stockholders' Equity (Deficit)</b>		
Current liabilities:		
Accounts payable	\$ 2,390	\$ 427
Accrued expenses	3,443	1,592
Current portion of long-term debt, net of issuance costs	-	926
Warrant liability	-	451
Other current liabilities	158	294
Total current liabilities	5,991	3,690
Long-term debt, net of issuance costs	9,868	8,469
Other noncurrent liabilities	2,904	714
Total liabilities	18,763	12,873
Commitments and contingencies (Note 7)		
Convertible preferred stock, \$0.0001 par value:		
Series Seed, 6,520,790 shares authorized, 0 and 6,520,790 issued and outstanding at September 30, 2021 and December 31, 2020, respectively; liquidation preference of \$0 and \$4,499,998 at September 30, 2021 and December 31, 2020, respectively	-	4,486
Series A, 12,932,429 shares authorized, 0 and 12,932,429 issued and outstanding at September 30, 2021 and December 31, 2020, respectively; liquidation preference of \$0 and \$20,000,002 at September 30, 2021 and December 31, 2020, respectively	-	19,908
Series B, 19,566,903 shares authorized, 0 and 19,373,169 issued and outstanding at September 30, 2021 and December 31, 2020, respectively; liquidation preference of \$0 and \$44,999,997 at September 30, 2021 and December 31, 2020, respectively	-	44,790
Stockholders' equity (deficit):		
Common stock, \$0.0001 par value; 400,000,000 and 60,272,685 shares authorized, 71,934,170 and 10,816,937 of shares outstanding at September 30, 2021 and December 31, 2020, respectively	7	1
Additional paid-in capital	484,202	1,552
Accumulated other comprehensive (loss) gain	(5)	17
Accumulated deficit	(132,136)	(53,125)
Total stockholders' equity (deficit)	352,068	(51,555)
Total liabilities, convertible preferred stock and stockholders' equity	\$ 370,831	\$ 30,502

See accompanying notes to these unaudited condensed financial statements.

**SINGULAR GENOMICS SYSTEMS, INC.**  
**Condensed Statements of Operations**  
**(Unaudited)**  
**(In thousands, except share and per share amounts)**

	<b>Three Months Ended September 30,</b>		<b>Nine Months Ended September 30,</b>	
	<b>2021</b>	<b>2020</b>	<b>2021</b>	<b>2020</b>
Operating expenses:				
Research and development	\$ 8,910	\$ 6,080	\$ 23,200	\$ 15,431
Selling, general and administrative	8,551	1,698	18,406	4,518
Total operating expenses	<u>17,461</u>	<u>7,778</u>	<u>41,606</u>	<u>19,949</u>
Loss from operations	(17,461)	(7,778)	(41,606)	(19,949)
Other income (expense):				
Interest income	91	76	223	444
Interest expense	(234)	(202)	(654)	(503)
Change in fair value of convertible promissory notes	-	-	(35,199)	-
Change in fair value of warrant liability	-	(49)	(2,180)	(49)
Other (expense) income	(7)	20	405	24
Net loss	<u>\$ (17,611)</u>	<u>\$ (7,933)</u>	<u>\$ (79,011)</u>	<u>\$ (20,033)</u>
Net loss per share:				
Basic and diluted net loss per share	\$ (0.25)	\$ (0.74)	\$ (2.05)	\$ (1.91)
Weighted-average shares used to compute basic and diluted net loss per share	71,721,861	10,726,496	38,553,685	10,507,732

See accompanying notes to these unaudited condensed financial statements.

**SINGULAR GENOMICS SYSTEMS, INC.**  
**Condensed Statements of Comprehensive Loss**  
**(Unaudited)**  
**(In thousands)**

	<b>Three Months Ended September 30,</b>		<b>Nine Months Ended September 30,</b>	
	<b>2021</b>	<b>2020</b>	<b>2021</b>	<b>2020</b>
Net loss	\$ (17,611)	\$ (7,933)	\$ (79,011)	\$ (20,033)
Other comprehensive loss:				
Unrealized (loss) gain on available-for-sale securities	(22)	(6)	(22)	24
Comprehensive loss	<u>\$ (17,633)</u>	<u>\$ (7,939)</u>	<u>\$ (79,033)</u>	<u>\$ (20,009)</u>

See accompanying notes to these unaudited condensed financial statements.

**SINGULAR GENOMICS SYSTEMS, INC.**  
**Condensed Statements of Preferred Stock and Stockholders' Equity (Deficit)**  
**(Unaudited)**  
**(In thousands, except share data)**

	Series Seed Convertible Preferred Stock		Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Common Stock		Additional Paid-In	Accumulated Other Comprehensive	Accumulated	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Capital	Gain (Loss)	Deficit	Equity (Deficit)
Balance at December 31, 2020	6,520,790	\$ 4,486	12,932,429	\$ 19,908	19,373,169	\$ 44,790	10,816,937	\$ 1	\$ 1,552	\$ 17	\$ (53,125)	\$ (51,555)
Vesting of common stock issued for early exercise of stock options	-	-	-	-	-	-	151,343	-	92	-	-	92
Issuance of common stock in connection with exercise of stock options	-	-	-	-	-	-	1,855,904	-	995	-	-	995
Stock-based compensation	-	-	-	-	-	-	-	-	1,096	-	-	1,096
Unrealized loss on available- for-sale marketable securities	-	-	-	-	-	-	-	-	-	(49)	-	(49)
Net loss	-	-	-	-	-	-	-	-	-	-	(23,921)	(23,921)
Balance at March 31, 2021	6,520,790	\$ 4,486	12,932,429	\$ 19,908	19,373,169	\$ 44,790	12,824,184	\$ 1	\$ 3,735	\$ (32)	\$ (77,046)	\$ (73,342)
Conversion of preferred stock into common stock	(6,520,790)	(4,486)	(12,932,429)	(19,908)	(19,373,169)	(44,790)	38,826,388	4	69,180	-	-	69,184
Conversion of the convertible promissory notes into common stock	-	-	-	-	-	-	7,531,777	1	165,698	-	-	165,699
Issuance of common stock upon initial public offering, net of issuance costs	-	-	-	-	-	-	11,730,000	1	237,198	-	-	237,199
Cashless exercise of common stock warrant	-	-	-	-	-	-	117,088	-	2,631	-	-	2,631
Vesting of common stock issued for early exercise of stock options	-	-	-	-	-	-	378,146	-	230	-	-	230
Issuance of common stock in connection with exercise of stock options	-	-	-	-	-	-	118,744	-	66	-	-	66
Stock-based compensation	-	-	-	-	-	-	-	-	2,341	-	-	2,341
Unrealized gain on available- for-sale marketable securities	-	-	-	-	-	-	-	-	-	49	-	49
Net loss	-	-	-	-	-	-	-	-	-	-	(37,479)	(37,479)
Balance at June 30, 2021	-	\$ -	-	\$ -	-	\$ -	71,526,327	\$ 7	\$ 481,079	\$ 17	\$ (114,525)	\$ 366,578
Vesting of common stock issued for early exercise of stock options	-	-	-	-	-	-	382,040	-	236	-	-	236
Issuance of common stock in connection with exercise of stock options	-	-	-	-	-	-	25,803	-	28	-	-	28
Stock-based compensation	-	-	-	-	-	-	-	-	2,859	-	-	2,859
Unrealized loss on available- for-sale marketable securities	-	-	-	-	-	-	-	-	-	(22)	-	(22)
Net loss	-	-	-	-	-	-	-	-	-	-	(17,611)	(17,611)
Balance at September 30, 2021	-	\$ -	-	\$ -	-	\$ -	71,934,170	\$ 7	\$ 484,202	\$ (5)	\$ (132,136)	\$ 352,068

[Table of Contents](#)

	Series Seed Convertible Preferred Stock		Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Common Stock		Additional Paid-In	Accumulated Other Comprehensive	Accumulated	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Capital	Gain (Loss)	Deficit	
Balance at December 31, 2019	6,520,790	\$ 4,486	12,932,429	\$ 19,908	19,373,169	\$ 44,820	10,063,023	\$ 1	\$ 440	\$ 14	\$ (25,180)	\$ (24,725)
Vesting of restricted common stock	-	-	-	-	-	-	420,833	-	-	-	-	-
Vesting of common stock issued for early exercise of stock options	-	-	-	-	-	-	6,445	-	8	-	-	8
Issuance of common stock in connection with exercise of stock options	-	-	-	-	-	-	18,124	-	4	-	-	4
Stock-based compensation	-	-	-	-	-	-	-	-	239	-	-	239
Unrealized loss on available-for-sale marketable securities	-	-	-	-	-	-	-	-	-	(542)	-	(542)
Net loss	-	-	-	-	-	-	-	-	-	-	(5,253)	(5,253)
Balance at March 31, 2020	6,520,790	\$ 4,486	12,932,429	\$ 19,908	19,373,169	\$ 44,820	10,508,425	\$ 1	\$ 691	\$ (528)	\$ (30,433)	\$ (30,269)
Vesting of restricted common stock	-	-	-	-	-	-	229,167	-	-	-	-	-
Vesting of common stock issued for early exercise of stock options	-	-	-	-	-	-	8,143	-	7	-	-	7
Issuance of common stock in connection with exercise of stock options	-	-	-	-	-	-	3,330	-	2	-	-	2
Stock-based compensation	-	-	-	-	-	-	-	-	260	-	-	260
Unrealized gain on available-for-sale marketable securities	-	-	-	-	-	-	-	-	-	572	-	572
Net loss	-	-	-	-	-	-	-	-	-	-	(6,847)	(6,847)
Balance at June 30, 2020	6,520,790	\$ 4,486	12,932,429	\$ 19,908	19,373,169	\$ 44,820	10,749,065	\$ 1	\$ 960	\$ 44	\$ (37,280)	\$ (36,275)
Issuance costs in connection with Series B convertible preferred stock	-	-	-	-	-	(30)	-	-	-	-	-	-
Vesting of restricted common stock	-	-	-	-	-	-	-	-	-	-	-	-
Vesting of common stock issued for early exercise of stock options	-	-	-	-	-	-	11,918	-	7	-	-	7
Issuance of common stock in connection with exercise of stock options	-	-	-	-	-	-	27,108	-	4	-	-	4
Stock-based compensation	-	-	-	-	-	-	-	-	271	-	-	270
Unrealized loss on available-for-sale marketable securities	-	-	-	-	-	-	-	-	-	(6)	-	(6)
Net loss	-	-	-	-	-	-	-	-	-	-	(7,933)	(7,933)
Balance at September 30, 2020	6,520,790	\$ 4,486	12,932,429	\$ 19,908	19,373,169	\$ 44,790	10,788,091	\$ 1	\$ 1,242	\$ 38	\$ (45,213)	\$ (43,933)

See accompanying notes to these unaudited condensed financial statements.

## SINGULAR GENOMICS SYSTEMS, INC.

## Condensed Statements of Cash Flows

(Unaudited)

(In thousands)

	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
<b>Operating activities</b>		
Net loss	\$ (79,011)	\$ (20,033)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	769	441
Loss on disposal of property and equipment	94	-
Stock-based compensation	6,296	770
Change in fair value of convertible promissory notes	35,199	-
Change in fair value of warrant liability	2,180	49
Amortization of premium on short-term investments	1,364	74
Accretion of debt issuance costs	243	157
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(6,025)	(345)
Other noncurrent assets	(919)	-
Accounts payable	1,643	(5)
Accrued expenses	1,851	858
Other current liabilities	(136)	91
Other noncurrent liabilities	450	56
Net cash used in operating activities	(36,002)	(17,887)
<b>Investing activities</b>		
Purchases of short-term investments	(146,070)	(6,086)
Sales of short-term investments	26,579	15,433
Maturities of short-term investments	15,049	8,146
Purchases of property and equipment	(3,094)	(1,143)
Net cash (used in) provided by investing activities	(107,536)	16,350
<b>Financing activities</b>		
Proceeds from initial public offering, net of issuance costs	237,199	-
Proceeds from issuance of convertible promissory notes	130,500	-
Proceeds from issuance of debt	10,500	7,500
Repayments of debt principal and issuance costs in connection with refinancing	(10,400)	-
Proceeds from exercise of stock options, net of repurchases	3,519	17
Issuance costs in connection with Series B convertible preferred stock	-	(30)
Net cash provided by financing activities	371,318	7,487
Increase in cash and cash equivalents and restricted cash	227,780	5,950
Cash and cash equivalents and restricted cash, beginning of year	12,170	5,523
Cash and cash equivalents and restricted cash, end of period	\$ 239,950	\$ 11,473
<b>Supplemental disclosure for cash activities</b>		
Interest paid	\$ 449	\$ 312
<b>Supplemental disclosure for non-cash activities</b>		
Vesting of restricted stock	\$ 558	\$ 22
Conversion of preferred stock to common stock	\$ 69,184	\$ -
Conversion of convertible promissory notes to common stock	\$ 165,699	\$ -
Purchase of property and equipment included in accounts payable	\$ 319	\$ 66
Warrant issued in connection with issuance of long-term debt	\$ -	\$ 189

See accompanying notes to these unaudited condensed financial statements.

**SINGULAR GENOMICS SYSTEMS, INC.**

**Notes to Condensed Financial Statements**

**(Unaudited)**

**1. Business**

**Description of Business**

Singular Genomics Systems, Inc. (the “Company”) is a life science technology company that is leveraging novel next-generation sequencing (“NGS”) and multiomics technology to build products that are designed to empower researchers and clinicians to advance science and medicine. The Company developed a novel and proprietary NGS technology, which it refers to as its Sequencing Engine. This Sequencing Engine is the foundational platform technology that forms the basis of the Company’s products in development. The Company is currently developing two integrated solutions that are purpose-built to target specific applications. Its first integrated solution is targeted at the NGS market and comprises the G4 Instrument and an associated menu of consumable kits, which is referred to collectively as the G4 Integrated Solution. The G4 Instrument is a benchtop next-generation sequencer designed to produce fast and accurate genetic sequencing results. The integrated purpose-built kits that run on the G4 Instrument address specific applications in fast-growing markets including oncology and immune profiling. The Company’s second integrated solution in development comprises the PX Instrument and an associated menu of consumable kits, which is referred to collectively as the PX Integrated Solution. Leveraging sequencing as a universal readout, the PX Integrated Solution combines single-cell analysis, spatial analysis, genomics and proteomics in one integrated instrument providing a versatile multiomics solution.

The Company was incorporated in the state of Delaware in June 2016 and has its principal operations in La Jolla, California.

**Initial Public Offering**

On June 1, 2021, the Company closed its initial public offering (“IPO”) in which it sold 11,730,000 shares of common stock (which included 1,530,000 shares that were sold pursuant to the full exercise of the IPO underwriters’ option to purchase additional shares) at a public offering price of \$22.00 per share. The Company received net proceeds of approximately \$237.2 million after deducting offering costs, underwriting discounts and commissions of \$20.9 million.

Concurrent with the closing of the IPO:

- 38,826,388 outstanding shares of convertible preferred stock converted into an equivalent number of shares of common stock;
- outstanding principal and interest amount of convertible promissory notes (the “2021 Convertible Notes”) converted into 7,531,777 shares of common stock; and
- a warrant to purchase 129,156 shares of convertible preferred stock (the “SVB Warrant”) was automatically adjusted to become a warrant to purchase an equivalent number of shares of common stock.

**Liquidity and Capital Resources**

The Company has incurred net losses since inception and, as of September 30, 2021 and December 31, 2020, had an accumulated deficit of \$132.1 million and \$53.1 million, respectively. The Company has a limited operating history and the revenue and income potential of the Company’s business are unproven. From incorporation in June 2016 through September 30, 2021, substantially all of the Company’s operations have been funded by the sales of equity securities and issuances of debt. As of September 30, 2021, the Company had cash, cash equivalents and short-term investments of \$357.0 million. The Company believes that its cash, cash equivalents and short-term investments as of September 30, 2021 are sufficient to fund its operations for at least 12 months from the issuance date of the accompanying unaudited condensed financial statements.

**2. Basis of Presentation and Summary of Significant Accounting Policies**

**Basis of Presentation and Use of Estimates**

The accompanying unaudited condensed financial statements have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, certain information and disclosures required by GAAP for annual financial statements have been omitted. In the opinion of management, all adjustments, consisting of normal recurring adjustments considered necessary for fair presentation, have been included. Interim financial results are not necessarily indicative of results anticipated for the full year.

The preparation of the Company’s unaudited condensed financial statements requires management to make estimates and assumptions that impact the reported amounts of assets, liabilities and expenses and the disclosure of contingent assets and liabilities

in the Company's unaudited condensed financial statements and accompanying notes. Although these estimates are based on the Company's knowledge of current events and actions it may undertake in the future, actual results may significantly differ from these estimates and assumptions. Significant estimates and assumptions include the fair value of the 2021 Convertible Notes, the fair value of the liability for the SVB Warrant, the fair value of the Company's preferred and common stock, stock-based compensation and the useful lives of property and equipment.

## Cash, Cash Equivalents and Restricted Cash

### Cash and Cash Equivalents

Cash and cash equivalents include cash readily available in checking, savings, money market and sweep accounts. 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.

### Restricted Cash

Restricted cash is held in a separate restricted bank account as the collateral for the security deposits on three executed lease agreements and as the collateral on the Company's corporate credit card program. The Company has classified restricted cash as noncurrent on its balance sheets.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the balance sheets (in thousands):

	September 30, 2021	December 31, 2020
Cash and cash equivalents	\$ 239,263	\$ 11,688
Restricted cash	687	482
Total	<u>\$ 239,950</u>	<u>\$ 12,170</u>

## Concentration of Credit Risk

Financial instruments, which potentially subject the Company to a concentration of credit risk, consist primarily of cash, cash equivalents and short-term investments. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. The Company has not experienced any losses in such accounts and management believes that the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held.

## Short-term Investments

As of September 30, 2021 and December 31, 2020, short-term investments primarily consisted of corporate debt securities and asset-backed securities. The Company classifies its investments in securities as available-for-sale because, for accounting purposes, they are not considered to be either held-to-maturity securities or trading securities. They are not considered to be held-to-maturity securities because the Company does not have the positive intent to hold those securities to maturity. They are not considered trading securities because they are not acquired with the intent of selling them within hours or days. The Company's investments in securities are classified as current as they are available for use in current operations. Short-term investments are carried at fair value with the unrealized gains and losses included in other comprehensive income (loss) as a component of stockholders' equity until realized. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity and recorded as interest income. Realized gains and losses are determined using the specific identification method and are included in other income (expense).

The following tables summarize the short-term investments held at September 30, 2021 and December 31, 2020 (in thousands):

	September 30, 2021		
	Amortized Cost	Gross Unrealized Gains (Losses)	Estimated Fair Value
Asset-backed securities	\$ 28,377	\$ (9)	\$ 28,368
Corporate debt securities	89,378	4	89,382
	<u>\$ 117,755</u>	<u>\$ (5)</u>	<u>\$ 117,750</u>

	December 31, 2020		
	Amortized Cost	Gross Unrealized Gains (Losses)	Estimated Fair Value
Asset-backed securities	\$ 3,938	\$ 5	\$ 3,943
Corporate debt securities	11,276	12	11,288
	<u>\$ 15,214</u>	<u>\$ 17</u>	<u>\$ 15,231</u>

The following table summarizes contractual maturities of available-for-sale securities held at September 30, 2021 and December 31, 2020 (in thousands):

	September 30, 2021	December 31, 2020
	Estimated Fair Value	Estimated Fair Value
Due within one year	\$ 85,263	\$ 9,559
After one but within five years	32,487	5,672
Total	<u>\$ 117,750</u>	<u>\$ 15,231</u>

The Company determined there was no other-than-temporary impairment of any of its investments.

### Property and Equipment, Net

Property and equipment, net, which consists primarily of lab equipment, computers and software, furniture and fixtures and leasehold improvements, are stated at cost less accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets (generally three to five years). Leasehold improvements are amortized over the remaining life of the lease or the useful life of the asset, whichever is shorter. Repairs and maintenance costs are charged to expense as incurred.

### Deferred Rent

Rent expense is recognized on a straight-line basis over the lease term. The difference between rent expense and amounts paid under the lease agreement is deferred and recorded in other current and noncurrent liabilities in the accompanying balance sheets.

### Impairment of Long-lived Assets

Long-lived assets consist primarily of property and equipment. The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the assets exceeds the fair value of the assets. Fair value would be assessed using discounted cash flows or other appropriate measures of fair value. The Company did not recognize any impairment losses for the nine months ended September 30, 2021 and September 30, 2020, respectively.

### Fair Value Measurements

Certain assets and liabilities are carried at fair value under GAAP and consist primarily of cash, cash equivalents, short-term investments, restricted cash, accounts payable, accrued liabilities, the 2021 Convertible Notes and the SVB Warrant. The carrying amounts of cash, cash equivalents, accounts payable, and accrued liabilities approximate their fair values due to the short-term nature of these instruments. None of the Company's non-financial assets or liabilities are recorded at fair value on a recurring basis.

As permitted under Accounting Standards Codification ("ASC") 825, *Financial Instruments* ("ASC 825"), the Company has elected the fair value option to account for its 2021 Convertible Notes and SVB Warrant. Changes in the fair value of the 2021 Convertible Notes and the SVB Warrant were recorded in the statements of operations. As a result of applying the fair value option, direct costs and fees related to the 2021 Convertible Notes were recognized as incurred and not deferred. In June 2021, in connection with the IPO completion, the 2021 Convertible Notes converted into the Company's common stock and the SVB Warrant was automatically adjusted into a warrant to purchase an equivalent number of shares of common stock.

There are significant judgments and estimates inherent in the determination of the fair value of these liabilities. If the Company had made different assumptions including, among others, those related to the timing and probability of various corporate scenarios,

discount rates, volatilities and exit valuations, the carrying values of the 2021 Convertible Notes and SVB Warrant, and net loss and net loss per share, could have been significantly different.

### Research and Development Expense

The Company's research and development expense consists primarily of: salaries, payroll taxes, employee benefits and stock-based compensation for personnel engaged in research and development activities; fees paid to consultants; license fees paid to third parties for use of their intellectual property, laboratory supplies and development materials; allocated information technology and facilities costs; and depreciation. Research and development costs are charged to expense as incurred.

### Patent Costs

Costs related to filing and pursuing patent applications are recorded as selling, general and administrative expenses within the Company's statements of operations and expensed as incurred since recoverability of such expenditures is uncertain.

### Issuance Costs Related to Equity and Debt

The Company allocates issuance costs between the individual freestanding instruments identified on the same basis as proceeds were allocated. Issuance costs associated with the issuance of debt is recorded as a direct reduction of the carrying amount of the debt liability, limited to the notional value of the debt. The Company accounts for the Silicon Valley Bank loan (see Note 6) as a liability measured at amortized cost and amortizes the related debt discount to interest expense using the effective interest method over the expected term of the debt.

### Stock-based Compensation

The Company accounts for stock-based compensation by measuring and recognizing compensation expense for all stock-based awards made to employees and non-employees based on estimated grant-date fair values. The Company uses the straight-line method to recognize compensation cost over the required service period of the award, which is generally the vesting period of the award. The Company recognizes actual forfeitures by reducing the stock-based compensation in the same period that the forfeitures occur. The Company estimates the fair value of stock-based option awards to employees and non-employees using the Black-Scholes option pricing model. The Black-Scholes option pricing model requires the input of subjective assumptions, including the fair value of common stock, expected term, expected volatility, risk-free interest rate and expected dividend yield, which are described in greater detail below.

Inputs to the Black-Scholes option pricing model are subjective and generally require the use of judgment. Changes in the assumptions can materially affect how much stock-based compensation is recognized. These inputs are as follows:

- **Fair value of common stock**—For awards granted prior to the IPO, when there was no public market for the Company's common stock, the grant date fair value of the Company's common stock was determined by the Company's board of directors based in part on valuations of the Company's common stock prepared by a third-party valuation specialist. In connection with the preparation of the financial statements for the year ended December 31, 2020, the Company performed a retrospective review of the fair value of its common stock based on information then available. For awards granted after the IPO, the fair value of common stock is the closing price per share of the Company's common stock on the grant date as reported on the Nasdaq Global Select Market.
- **Expected term**—The expected term represents the average period that options granted are expected to be outstanding and is determined using the simplified method (based on the mid-point between the weighted-average vesting period and the end of the contractual term). The Company uses the simplified method because the Company has concluded that its historical option exercise experience does not provide a reasonable basis to estimate expected term.
- **Expected volatility**—The Company had no publicly available stock price information prior to its IPO and limited publicly available stock price information after its IPO; therefore, the Company used the historical volatility of the stock price of similar publicly traded companies. The historical volatility is calculated based on a period of time commensurate with the expected term.
- **Risk-free interest rate**—The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term.
- **Expected dividend yield**—The Company has never paid dividends and does not intend to pay dividends in the foreseeable future. Therefore, the Company used an expected dividend yield of zero.

### Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this

method, deferred tax assets and liabilities are determined on the basis of the differences between the financial statements and the tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized as income or expense in the period that includes the enactment date.

The Company recognizes net deferred tax assets to the extent that the Company believes these assets are more likely than not to be realized. In making such a determination, management considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies and results of recent operations.

If management determines that the Company would be able to realize its deferred tax assets in the future in excess of their net recorded amount, management would make an adjustment to the deferred tax asset valuation allowance, which would reduce any provision for income taxes.

The Company records uncertain tax positions on the basis of a two-step process whereby: (i) management determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position; and (ii) for those tax positions that meet the more-likely-than-not recognition threshold, management recognizes the largest amount of tax benefit that is more than 50% likely to be realized upon ultimate settlement with the related tax authority. The Company will recognize interest and penalties related to unrecognized tax benefits within income tax expense.

### **Comprehensive Income (Loss)**

Comprehensive income (loss) is defined as a change in equity during a period from transactions and other events and circumstances from non-owner sources. The only component of other comprehensive income (loss) is unrealized gain (loss) on available-for-sale securities, which have been reflected in the statements of comprehensive loss and as a separate component in the statements of preferred stock and stockholders' equity (deficit).

### **Net Loss per Share**

In periods of net loss, basic loss per share is computed by dividing net loss available to common stockholders by the weighted-average number of shares of common stock outstanding during the period, without consideration for potentially dilutive securities. For periods prior to the IPO, the convertible preferred stock contain non-forfeitable rights to dividends with the common stockholders, and therefore are considered to be participating securities. Outstanding stock options, the SVB Warrant, convertible preferred stock and shares of common stock subject to repurchase by the Company are excluded from the calculation of diluted net loss per common share for the periods presented as their effect would be anti-dilutive. Thus, for all periods presented, there is no difference in the number of shares used to calculate basic and diluted net loss per share.

### **Segment Information**

Operating segments are components of a public entity that: (a) engage in business activities from which they may recognize revenues and incur expenses; (b) have operating results that are regularly reviewed by the chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance; and (c) have discrete financial information available. The Company views its operations and manages its business as one operating segment, and thus has one reportable segment. The Company's long-lived assets are located in the United States.

### **Recent Accounting Pronouncements—Not Yet Adopted**

In February 2016, the FASB issued ASU No. 2016-02, *Leases* ("ASU 2016-02"). The standard establishes a right-of-use model and requires a lessee to recognize on the balance sheet a right-of-use asset and corresponding lease liability for all leases with terms longer than 12 months. For lessees, leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. ASU 2016-02 is effective for the Company's annual periods beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022, and early adoption is permitted. The Company is currently evaluating the impact that the adoption of this guidance will have on its financial statements and related disclosures.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses: Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"), which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses to estimate credit losses on certain types of financial instruments, including trade receivables and available-for-sale debt securities. ASU 2016-13 is effective for the Company's annual periods beginning after December 15, 2022, with early adoption permitted. The Company is currently evaluating the impact that the adoption of this guidance will have on its financial statements and related disclosures.

In November 2018, the FASB issued ASU No. 2018-18 ("ASU 2018-18"), which clarifies the interaction between ASC Topic 808, *Collaborative Arrangements*, and ASC Topic 606, *Revenue from Contracts with Customers*. This guidance, among other items,

clarifies that certain transactions between collaborative participants should be accounted for as revenue under Topic 606 when the collaborative arrangement participant is a customer in the context of a unit of account. ASU 2018-18 is effective for the Company's fiscal years beginning after December 15, 2020, and interim periods within fiscal years beginning after December 15, 2021. The Company does not expect the impact of the adoption of this standard to materially impact its financial statements and related disclosures.

In December 2019, the FASB issued ASU No. 2019-12, *Simplifying the Accounting for Income Taxes* ("ASU 2019-12"), as part of its initiative to reduce complexity in accounting standards. The ASU is effective for the Company's fiscal years beginning after December 15, 2021, including interim periods therein. Early adoption of the standard is permitted, including adoption in interim or annual periods for which financial statements have not yet been issued. The Company does not expect the impact of the adoption of this standard to materially impact its financial statements and related disclosures.

### 3. Fair Value Measurements

For accounting purposes, fair value is defined as an exit price representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the accounting guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1: Observable inputs such as quoted prices in active markets.

Level 2: Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly.

Level 3: Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

When quoted market prices are available in active markets, the fair value of assets and liabilities is estimated within Level 1 of the valuation hierarchy. If quoted prices are not available, then fair values are estimated by using pricing models, quoted prices of assets and liabilities with similar characteristics, or discounted cash flows, within Level 2 of the valuation hierarchy. In cases where Level 1 or Level 2 inputs are not available, the fair values are estimated by using inputs within Level 3 of the hierarchy.

None of the Company's assets or liabilities are recorded at fair value on a recurring basis other than cash and cash equivalents, short-term investments, the liability for the SVB Warrant and the 2021 Convertible Notes prior to their conversion. No transfers between levels occurred during the periods presented. The fair value of short-term investments is based on market prices quoted on the last day of the fiscal period or other observable market inputs.

The following tables summarize the Company's assets and liabilities measured at fair value on a recurring basis as of September 30, 2021 and December 31, 2020 (in thousands):

	<b>September 30, 2021</b>			
<b>Assets:</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Cash and money market funds	\$ 239,263	\$ -	\$ -	\$ 239,263
Asset-backed securities	-	28,368	-	28,368
Corporate debt securities	-	89,382	-	89,382
Total assets	<u>\$ 239,263</u>	<u>\$ 117,750</u>	<u>\$ -</u>	<u>\$ 357,013</u>
	<b>December 31, 2020</b>			
<b>Assets:</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Cash and money market funds	\$ 11,688	\$ -	\$ -	\$ 11,688
Asset-backed securities	-	3,943	-	3,943
Corporate debt securities	-	11,288	-	11,288
Total assets	<u>\$ 11,688</u>	<u>\$ 15,231</u>	<u>\$ -</u>	<u>\$ 26,919</u>
<b>Liabilities:</b>				
Warrant liability	\$ -	\$ -	\$ 451	\$ 451
Total liabilities	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 451</u>	<u>\$ 451</u>

### SVB Warrant

In November 2019, simultaneously with the first draw-down under its 2019 SVB Loan (see Note 6), SVB entered into a warrant agreement with the Company to purchase 32,289 shares of Series B convertible preferred stock of the Company at an exercise price of

\$2.3228 per share (as amended, the “SVB Warrant”). In March 2020, in connection with the Company’s second draw-down under the 2019 SVB Loan, the SVB Warrant was amended to increase the number of shares of Series B convertible preferred stock of the Company by 96,867, to a total of 129,156 shares. In connection with the completion of the Company’s IPO, in accordance with the original terms the warrant instrument, the SVB Warrant was automatically adjusted into a warrant to purchase an equivalent number of shares of common stock. In June 2021, after the IPO, SVB net exercised the SVB Warrant into 117,088 shares of common stock of the Company, and the SVB Warrant is no longer outstanding as of September 30, 2021.

The fair value of the SVB Warrant liability was remeasured at each financial reporting period with any changes in fair value recognized as other income (expense) in the statements of operations. The fair value for the warrant liability for the SVB Warrant was based on the Black-Scholes option pricing valuation model using significant inputs not observable in the market and was thus classified within Level 3 of the fair value hierarchy. The change in fair value of the warrant for the nine months ended September 30, 2021 and 2020 was \$2.2 million and \$49 thousand, respectively. When, in connection with the IPO, the SVB Warrant was automatically adjusted into a warrant to purchase an equivalent number of shares of common stock, the warrant liability was reclassified from current liabilities to equity as the warrant met the definition of an equity instrument. Additionally, at that time, the Company recorded the final valuation of the warrant liability for the SVB Warrant.

The following table provides a roll forward of the SVB Warrant liability measured at fair value for the nine months ended September 30, 2021 (in thousands):

Balance at December 31, 2020	\$	451
Change in fair value of warrant through conversion		2,180
Reclassification of warrant liability into equity		(2,631)
Balance at September 30, 2021	<u>\$</u>	<u>-</u>

Below are the assumptions used in the Black-Scholes option pricing model for the fair value of the SVB Warrant liability as of the closing of the IPO, when the SVB Warrant was automatically adjusted into a warrant to purchase an equivalent number of shares of common stock, and December 31, 2020:

<b>Assumption</b>	<b>At IPO</b>	<b>December 31, 2020</b>
Fair value of underlying (\$)	22.00	4.59
Expected volatility	62.00%	60.00%
Expected term (years)	8.47	8.99
Expected dividend yield	0.00%	0.00%
Risk-free interest rate	1.62%	0.93%

The fair value of the Series B convertible preferred stock underlying the SVB Warrant prior to the conversion of the Series B convertible preferred stock was estimated by management with the assistance of a third-party valuation specialist. The expected volatility was based on historical volatilities from guideline companies, since there was no active market for the Company’s preferred stock or common stock. The Company based the expected term assumption on the actual remaining contractual term of the warrant as of the date of measurement. The Company has not paid dividends and does not intend to pay dividends in the foreseeable future. The risk-free interest rate used was the rate for a U.S. Treasury zero-coupon issue with a term consistent with the remaining contractual term of the SVB Warrant on the date of measurement.

## 2021 Convertible Notes

In February 2021, the Company sold and issued approximately \$130.5 million aggregate principal of 2021 Convertible Notes in a private placement transaction. The 2021 Convertible Notes accrued 6% interest per annum. The Company elected as of the issuance date to account for the 2021 Convertible Notes at fair value. Management believes that the fair value option better reflected the underlying economics of the 2021 Convertible Notes, which contained multiple embedded derivatives. Under the fair value election, changes in fair value are reported as “Change in fair value of convertible promissory notes” in the statements of operations in each reporting period after the issuance through the conversion of the 2021 Convertible Notes. The Company measured the fair value of the 2021 Convertible Notes using the probability weighted “as-converted” plus Black-Scholes option pricing model based on inputs such as the probability of IPO vs. non-IPO scenarios, fair value of the common stock price, discount yield, risk-free rate, equity volatility, expected term, number of converted shares and price negotiation adjustment for the calibration. In connection with the IPO, the 2021 Convertible Notes converted into 7,531,777 shares of the Company’s common stock. Based on the terms of the agreement, the 2021 Convertible Notes converted at a 20% discount to the public offering price in the IPO. At the time of the conversion, the Company recorded a final fair value adjustment of the 2021 Convertible Notes using the Company’s common stock price at the IPO.

Balance at December 31, 2020	\$	-
Fair value of convertible promissory notes at issuance		130,500
Change in fair value of convertible promissory notes through conversion		35,199
Conversion of convertible promissory notes		(165,699)
Balance at September 30, 2021	\$	-

There are significant judgments, assumptions and estimates inherent in the determination of the fair value of the SVB Warrant liability and the 2021 Convertible Notes. These include the determination of a valuation method and selection of the possible outcomes available to the Company, including the determination of timing and expected future investment returns for each such scenario. The Company considered the equity value of an initial public offering using market transactions and had determined the expected value of a stay-private scenario using the income approach, which is based on assumptions regarding the Company's future operating performance. The related judgments, assumptions and estimates are highly interrelated and changes in any one assumption could necessitate changes in another. In particular, any changes to the probability of a particular outcome would require a related change to the probability of another outcome. The fair value of the 2021 Convertible Notes is derived using assumptions that are consistent with the assumptions used to value the Company's common stock and the SVB Warrant.

As of September 30, 2021, the Level 3 liabilities no longer exist as a result of the conversion of the 2021 Convertible Notes and as a result of the SVB Warrant becoming exercisable into common stock in connection with the IPO.

#### 4. Property and Equipment, Net

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

	Useful Life	September 30, 2021	December 31, 2020
Equipment	5 years	\$ 3,854	\$ 2,642
Computers and software	3 years	1,591	851
Furniture and fixtures	3 years	69	80
Leasehold improvements	4 years or less	35	35
Construction in progress	N/A	1,191	-
		6,740	3,608
Less: accumulated depreciation		(1,823)	(1,240)
Total property and equipment, net		\$ 4,917	\$ 2,368

#### 5. Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	September 30, 2021	December 31, 2020
Accrued compensation and other employee benefits	\$ 2,814	\$ 1,234
Accrued professional services	357	74
Accrued research and development expenses	70	44
Accrued other expenses	202	240
Total accrued expenses	\$ 3,443	\$ 1,592

## 6. Long-term Debt

### Silicon Valley Bank Loan

In November 2019, the Company entered into a loan and security agreement with Silicon Valley Bank (“SVB”) pursuant to which SVB agreed to lend to the Company up to \$15.0 million in a series of term loans (the “2019 SVB Loan”). Contemporaneously, the Company borrowed \$2.5 million in the first of three draw-downs available under the 2019 SVB Loan. In March 2020, the Company borrowed an additional \$7.5 million as a second draw. The 2019 SVB Loan was to mature on September 1, 2023 and bore interest at an annual rate equal to the greater of (i) 0.65% above the prime rate or (ii) 5.90%. Payment on the 2019 SVB Loan was for interest only through September 30, 2021. In addition, a final payment equal to the original principal amount of each advance multiplied by 5.50% was to be due on the maturity date. In connection with the 2019 SVB Loan, SVB entered into the SVB Warrant agreement with the Company to purchase shares of Series B convertible preferred stock at an exercise price of \$2.3228 per share (see Note 3).

On September 30, 2021, the Company refinanced its 2019 SVB Loan. In connection with the refinancing, the Company entered into an Amended and Restated Loan and Security Agreement (the “Amended Agreement” or “2021 SVB Loan”, together with the 2019 SVB Loan, the “SVB Loans”) with SVB. The Amended Agreement provides for term loans in an aggregate principal amount of up to \$35.5 million to be delivered in three tranches. The tranches consist of: (i) a term loan advance to the Company in an aggregate principal amount of \$10.5 million on the loan closing date (the “First Tranche”); (ii) an additional term loan advance available to the Company through September 30, 2022 in an aggregate principal amount of \$15.0 million; and (iii) subject to SVB’s approval, a right of the Company to request that SVB make an additional term loan advance in an aggregate principal amount of \$10.0 million. The proceeds from the First Tranche were used to repay in full the existing indebtedness under the 2019 SVB Loan. The 2021 SVB Loan matures on September 1, 2026 and bears interest at an annual rate equal to the greater of (i) 0.75% plus the prime rate as reported in *The Wall Street Journal* and (ii) 4.00%. The 2021 SVB Loan has an initial interest-only period of 36 months. In addition, a final payment (the “Final Payment Fee”) equal to the original principal amount of each advance multiplied by 4.00% will be due on the maturity date.

The Amended Agreement was accounted for as a debt modification, rather than an extinguishment, based on a comparison of the present value of the cash flows under the terms of the debt immediately before and after the amendment, which resulted in a change of such cash flows of less than 10%. Unamortized debt issuance costs as of the date of modification and incremental issuance costs incurred in connection with the Amended Agreement will be amortized to interest expense using the effective interest method over the repayment term.

As of September 30, 2021 and December 31, 2020, the debt issuance costs related to the SVB Loans were \$0.6 million. Debt issuance costs include the initial fair value of the SVB Warrant. The debt issuance costs are amortized to interest expense over the term of the loan using the effective interest method.

The SVB Loans and unamortized discount balances as of September 30, 2021 and December 31, 2020 are shown below (in thousands):

	September 30, 2021	December 31, 2020
Total long-term debt	\$ 10,500	\$ 10,000
Less: issuance costs	(632)	(605)
Total long-term debt, net	9,868	9,395
Less current portion of long-term debt	-	(926)
Long-term debt, net of current portion	\$ 9,868	\$ 8,469

Future minimum payments of outstanding principal and interest under the 2021 SVB Loan are as follows:

#### As of September 30, 2021

2021 (three months remaining)	\$ 106
2022	426
2023	426
2024	1,735
2025 and thereafter	9,949
Total future minimum payments	12,642
Less: interest and Final Payment Fee	(2,142)
Long-term debt	\$ 10,500

The Company is subject to customary affirmative and restrictive covenants under the Amended Agreement. The Company's obligations under the Amended Agreement are secured by a first priority security interest in substantially all of the Company's current and future assets, other than intellectual property. The Company has agreed not to encumber its intellectual property assets, except as permitted by the Amended Agreement.

The Amended Agreement provides for events of default customary for term loan facilities of this type, including but not limited to: non-payment; breaches or defaults in the performance of covenants or representations and warranties; bankruptcy and other insolvency events of the Company; and the occurrence of a material adverse change as defined in the Amended Agreement. After the occurrence of an event of default, SVB may, among other remedies, accelerate payment of all obligations.

As of September 30, 2021 and December 31, 2020, the Company was in compliance with all covenants under the Amended Agreement and 2019 SVB Loan, respectively, and there had been no events of default.

## **2021 Convertible Notes**

In February 2021, the Company issued the 2021 Convertible Notes to various investors, in the aggregate principal amount of \$130.5 million (see Note 3). The 2021 Convertible Notes accrued interest at 6% per annum. Due to certain embedded features within the 2021 Convertible Notes, the Company elected to account for these notes and all their embedded features under the fair value option. In June 2021, in connection with the completion of the Company's IPO, the Notes were converted into 7,531,777 shares of the Company's common stock.

## **7. Commitments and Contingencies**

### **Columbia License Agreement and Sponsored Research Agreement**

In 2016, the Company entered into an exclusive license agreement (the "License Agreement") with The Trustees of Columbia University ("Columbia"). Under the License Agreement, the Company acquired the exclusive right to use certain patents, materials and information. The License Agreement includes a number of diligence obligations that require the Company to use commercially reasonable efforts to research, discover, develop and market products covered by the patents, materials and information licensed by Columbia by certain dates. The License Agreement provides for the potential payment to Columbia of development milestones and royalties on net sales of products covered by the licensed patents, materials or information. The license fee was immaterial for all periods presented. The Company does not believe that its G4 or PX Instruments or the associated consumables, as the Company presently intends to commercialize them, fit within the definitions in the License Agreement that would require the Company to make milestone payments or pay royalties on sales of these products and as a result no amounts have been accrued to date. However, there is no assurance that Columbia will agree with the Company's interpretation of the License Agreement or its payment obligations thereunder or agree that the Company has complied with its other obligations under the License Agreement.

In addition to the License Agreement, the Company entered into a sponsored research agreement to fund a research program with Columbia. The program ended in 2019.

### **Operating Leases**

In November 2017, the Company entered into a non-cancelable operating lease that expires upon commencement of the New HQ Lease, as defined below (estimated second quarter of 2022). The lease includes certain rent escalations and additional charges for common area maintenance and other costs. The Company gained access to the leased space and began recognizing rent expense under this lease in February 2018.

In December 2019, the Company entered into a 5-year lease agreement for additional office space in San Diego, California. The lease includes certain rent escalations and additional charges for common area maintenance and other costs. The Company gained access to the leased space and began recognizing rent expense under this lease in January 2020.

In June 2020, the Company entered into a sublease agreement for an additional office space in La Jolla, California. The sublease includes certain rent escalations and additional charges for common area maintenance and other costs. The Company gained access to the leased space and began recognizing rent expense under this sublease in July 2020.

In June 2020, the Company entered into a 10-year lease agreement with ARE-SD Region No. 27, LLC (the "Landlord") for new office and laboratory space containing approximately 76,778 rentable square feet located in La Jolla, California ("New HQ Lease"), with a target commencement date in April 2022. If landlord does not deliver the premises within 120 days of the target commencement date for any reason other than force majeure delays or delays by the Company, the Company may terminate the lease and neither the Landlord nor the Company will have any further rights, duties or obligations under the New HQ Lease. The Landlord

shall make available to the Company for use within 12 months after the commencement date a tenant improvement allowance (“TI Allowance”), which the Company will repay to the landlord as additional rent over the base term and shall accrue interest at a rate of 8% per annum. Upon commencement, the contractual base rent will be charged, subject to partial rent abatement, annual base rent adjustments, the Company’s share of operating expenses and additional rent for the TI Allowance actually disbursed by the Landlord.

In April 2021, the Company entered into a 62-month lease agreement for additional office space in San Diego, California. The lease includes certain rent escalations and additional charges for common area maintenance and other costs. The Company gained access to the leased space in June 2021 and began recognizing rent expense under this lease at that time.

In April 2021, the Company amended its current lease for office space in La Jolla, California. The lease amendment includes extension of the current lease expiration date by 24-months subsequent to commencement of New HQ Lease, expansion of the existing premises for additional space and certain rent escalations.

The Company recorded rent expense of \$1.4 million and \$0.3 million for the nine months ended September 30, 2021 and 2020.

Future minimum payments under the Company’s non-cancelable operating leases are as follows (in thousands):

<b>As of September 30, 2021</b>	<b>Operating Lease</b>
2021 (three months remaining)	\$ 635
2022	6,265
2023	7,892
2024	6,394
2025 and thereafter	42,122
	<u>\$ 63,308</u>

#### **Indemnification**

As permitted under Delaware law and in accordance with the Company’s bylaws, the Company indemnifies its officers and directors for certain events or occurrences while the officers or directors are or were serving in such capacity. The Company is also party to indemnification agreements with its officers and directors. The Company considers the fair value of the indemnification rights and agreements as minimal. Accordingly, the Company has not recorded any liabilities for these indemnification rights and agreements as of September 30, 2021.

#### **8. Convertible Preferred Stock**

Prior to its conversion to common stock in connection with the Company’s IPO, the convertible preferred stock was classified as temporary, or mezzanine, equity on the accompanying condensed balance sheets since the shares contained certain redemption features that were not solely within the control of the Company. The Company had not previously accreted the convertible preferred stock to its redemption value since the shares were not redeemable and redemption was not deemed to be probable. In connection with the completion of the Company’s IPO, all of the outstanding shares of convertible preferred stock were automatically converted into 38,826,388 shares of the Company’s common stock.

The convertible preferred stock outstanding prior to its conversion in the IPO was as follows:

	<b>Shares Authorized</b>	<b>Shares issued and Converted</b>	<b>Issue Period</b>	<b>Price Per Share</b>	<b>Aggregate Liquidation Preference</b>
Series Seed	6,520,790	6,520,790	2016	\$ 0.6901	\$ 4,500,000
Series A	12,932,429	12,932,429	2017	1.5465	20,000,000
Series B	19,566,903	19,373,169	2019	2.3228	45,000,000
	<u>39,020,122</u>	<u>38,826,388</u>			<u>\$ 69,500,000</u>

## 9. Stock Incentive Plans

### 2021 and 2016 Equity Incentive Plans

The Company's Board of Directors and stockholders adopted and approved the Company's 2021 Equity Incentive Plan (the "2021 Plan") in May 2021. The 2021 Plan replaced the Company's 2016 Equity Incentive Plan adopted in September 2016 (the "2016 Plan"); however, awards outstanding under the 2016 Plan will continue to be governed by their existing terms. The number of shares of the Company's common stock that were initially available for issuance under the 2021 Plan equaled the sum of 7,500,000 shares plus 832,980 shares that were then available for issuance under the 2016 Plan. The 2021 Plan provides for the following types of awards: incentive and nonqualified stock options, stock appreciation rights, restricted shares and restricted stock units.

The number of shares of common stock reserved for issuance under the 2021 Plan are increased automatically on the first business day of each fiscal year, commencing in 2022 and ending in 2031, by a number equal to the lesser of: (i) 5% of the shares of common stock outstanding on the last business day of the prior fiscal year; or (ii) the number of shares determined by the Company's Board of Directors. In general, to the extent that any awards under the 2021 Plan are forfeited, terminated, expired or lapsed without the issuance of shares, or if the Company reacquires the shares subject to awards granted under the 2021 Plan, those shares will again become available for issuance under the 2021 Plan, as will shares applied to pay the exercise or purchase price of an award or to satisfy tax withholding obligations related to an award.

Stock-based awards are governed by agreements between the Company and the recipients. Incentive stock options and nonqualified stock options may be granted under the 2021 Plan (and previously the 2016 Plan) at an exercise price of not less than 100% of the fair market value of the Company's common stock on the date of grant. The grant date is the date the terms of the award are formally approved by the Company's Board of Directors or its designee.

The following table summarizes stock option activity under the stock incentive plans since December 31, 2020:

	<u>Number of Options</u>	<u>Weighted average exercise price (per share)</u>	<u>Weighted average remaining contract term (in years)</u>
Outstanding at December 31, 2020	7,274,953	\$ 0.57	8.81
Exercisable at December 31, 2020	7,274,953	0.57	8.81
Granted	3,111,273	9.47	
Exercised	(5,415,875)	0.65	
Canceled or forfeited	(102,504)	3.57	
Outstanding at September 30, 2021	4,867,847	6.10	8.71
Exercisable at September 30, 2021	3,373,469	\$ 2.92	8.32

The 2016 Plan allows for the early exercise of awards to plan participants subject to the right of repurchase by the Company at the lower of the original exercise price or fair market value for unvested awards. At September 30, 2021 and December 31, 2020, the Company has a liability for the cash received from the early exercise of stock options in the amount of \$1.9 million and approximately zero, respectively. The Company reduces the liability as the underlying shares vest in accordance with the vesting terms of the awards.

As of September 30, 2021 and December 31, 2020, there were 2,585,250 and 141,955, respectively, of early exercised stock options that remain subject to the Company's repurchase right.

### Employee Stock Purchase Plan

In May 2021, the Company's Board of Directors approved the 2021 Employee Stock Purchase Plan (the "ESPP"). A total of 730,000 shares of common stock was initially reserved for issuance under the ESPP. The price at which common stock is purchased by employees under the ESPP is equal to 85% of the fair market value of the common stock on the first day of the offering period or purchase date, whichever is lower.

During the nine months ended September 30, 2021, no shares of common stock were issued under the ESPP.

## Stock-based Compensation Summary

The classification of stock-based compensation expense is summarized as follows (in thousands):

	Three Months Ended September 30, 2021		Nine Months Ended September 30, 2021	
	2021	2020	2021	2020
Research and development	\$ 968	\$ 64	\$ 1,774	\$ 157
Selling, general and administrative	1,891	207	4,522	613
Total equity-based compensation expense	<u>\$ 2,859</u>	<u>\$ 271</u>	<u>\$ 6,296</u>	<u>\$ 770</u>

As of September 30, 2021, total unrecognized stock-based compensation expense was \$31.9 million and is expected to be recognized over the weighted-average period of approximately 2.7 years.

The following table shows the weighted-average assumptions used to compute the fair value of the awards granted to employees and nonemployees using the Black-Scholes option pricing model:

Assumption	Nine Months Ended September 30,	
	2021	2020
Expected volatility	77.22%	60.00%
Expected term (years)	5.5–6.1	5.3–6.1
Expected dividend yield	0.00%	0.00%
Risk-free interest rate	0.91%	0.72%

Common stock reserved for future issuance consisted of the following as of September 30, 2021:

Stock options issued and outstanding	4,867,847
Authorized for future grants under the 2021 Plan	7,764,283
Authorized for issuance under the ESPP	730,000
Balance at September 30, 2021	<u>13,362,130</u>

## 10. Net Loss per Share

The following table sets forth the computation of basic and diluted net loss per share for the periods indicated (in thousands, except share and per share data):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Net loss	\$ (17,611)	\$ (7,933)	\$ (79,011)	\$ (20,033)
Weighted average shares used in computing net loss per share, basic and diluted	71,721,861	10,726,496	38,553,685	10,507,732
Net loss per share, basic and diluted	<u>\$ (0.25)</u>	<u>\$ (0.74)</u>	<u>\$ (2.05)</u>	<u>\$ (1.91)</u>

The following outstanding shares of common stock equivalents were excluded from the computation of diluted net loss per share for the periods presented because including them would have had an anti-dilutive effect:

	<b>September 30,</b>	
	<b>2021</b>	<b>2020</b>
Employee stock options issued and outstanding	4,867,847	7,015,851
SVB Warrant	-	129,156
Series Seed convertible preferred stock	-	6,520,790
Series A convertible preferred stock	-	12,932,429
Series B convertible preferred stock	-	19,373,169
	<u>4,867,847</u>	<u>45,971,395</u>

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

*The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our financial statements and the related notes to those statements included in Item 1 of this report. In addition to historical financial information, the following discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results and timing of selected events may differ materially from those anticipated in these forward-looking statements as a result of many factors, including, but not limited to, those discussed under the section titled "Risk Factors" elsewhere in this report. See the section titled "Special Note Regarding Forward-Looking Statements" elsewhere in this report.*

### Overview

We are a life science technology company that is leveraging novel next-generation sequencing ("NGS") and multiomics technologies to build products that empower researchers and clinicians. We developed a unique and proprietary NGS technology, which we refer to as our Sequencing Engine. This Sequencing Engine is the foundational platform technology that forms the basis of our products in development and our core product tenets: accuracy, speed, flexibility and scale. We are currently developing two integrated solutions that are purpose-built to target specific applications in which these core product tenets matter most. Our first integrated solution is targeted at the NGS market and comprises the G4 Instrument and an associated menu of consumable kits, which we refer to collectively as our G4 Integrated Solution. The G4 Instrument is a benchtop next-generation sequencer designed to produce fast and accurate genetic sequencing results. The integrated purpose-built kits that run on the G4 Instrument address specific applications in fast-growing markets including oncology and immune profiling. We have completed our beta pilot program, are underway with our early access program, and anticipate a commercial launch of the G4 Integrated Solution by the end of 2021 with intentions for units to ship in the first half of 2022. Our second integrated solution in development comprises the PX Instrument and an associated menu of consumable kits, which we refer to collectively as our PX Integrated Solution. Leveraging sequencing as a universal readout, the PX Integrated Solution combines single-cell analysis, spatial analysis, genomics and proteomics in one integrated instrument providing a versatile multiomics solution. We anticipate commercial launch of the PX Integrated Solution in 2023.

The core of our Sequencing Engine is comprised of unique and proprietary chemistry, including novel chemical compounds, polymers and enzymes. This chemistry is designed to produce high sequencing accuracy and rapid cycle times that we believe can drive improvements in NGS. To take full advantage of the proprietary chemistry, we are developing purpose-built instrumentation consisting of high-speed, high-resolution imaging and innovative fluidic design. We believe that our Sequencing Engine, together with our proprietary innovations in molecular biology techniques, will enable differentiated applications in fast-growing markets. These innovations are supported by our intellectual property portfolio.

Each of our two integrated solutions in development consists of an instrument that incorporates our Sequencing Engine and associated consumables that are used exclusively on each instrument. The G4 Integrated Solution is designed to target the NGS market in particular applications that require accuracy, speed, flexibility and scale. We are focused on oncology where there is an increasing need for higher sensitivity technology such as rare variant detection in liquid biopsy. Another area of focus is immunology where there is a need to better understand and harness the immune system in infectious disease, autoimmune disorders and cancer immunotherapy. We aim to execute a three-step commercialization plan for our G4 Integrated Solution consisting of: (i) collaborating with select partners to conduct beta pilot tests, which we have completed; (ii) expanding collaborations with additional potential customers in our early access program; and (iii) offering our G4 Integrated Solution broadly to the market, with commercial launch by the end of 2021 and shipping units in the first half of 2022.

The PX Integrated Solution is our second product in development and is a multiomics platform designed to target the markets for single-cell, spatial analysis and proteomics. The PX Integrated Solution will leverage our Sequencing Engine as a readout mechanism to provide a high-resolution view of biology at the single-cell and tissue level. We believe the PX Integrated Solution, when launched, will be a high-throughput, versatile platform capable of measuring levels of RNA transcription, protein expression and sequence specific information directly in cells and tissues. We believe the PX Integrated Solution will have broad application across many areas of biology. We are initially focused on applications in oncology and immunology, with future expansion into other applications such as neurology. We are currently in an advanced prototype development stage for the PX Integrated Solution, and expect to begin an early access program in 2022 and full commercial launch in 2023. We believe that our G4 and PX Integrated Solutions can unleash the full power of sequencing as a universal reader of biology and open new frontiers in research and medicine.

Our research and development teams have designed and developed our proprietary products using an interdisciplinary approach that combines expertise across a broad range of scientific disciplines including chemistry, molecular biology, hardware, software and engineering. Our research and development groups work together to build products that enable researchers and clinicians to accelerate discoveries across the fastest-growing markets in basic research, clinical applications, single-cell analysis and spatial genomics and proteomics. Our research and development teams are located in our headquarters in La Jolla, California. The overarching goal of our research and development programs is to accelerate genomics for the advancement of science and medicine. To this end, we focus our research and development efforts on the following areas: improving the performance of our core Sequencing Engine; developing new

applications for our G4 Integrated Solution; developing our PX Integrated Solution; and enabling future instruments.

As of September 30, 2021, we had 116 employees in research and development. Looking forward, we will continue to invest in efforts to support the ongoing development of our instruments and consumables, as well as enhance the overall performance of our solutions.

Our business model focuses on first driving customer adoption of our G4 Integrated Solution followed by our PX Integrated Solution. We believe customer adoption will then form a base of users who in turn drive an ongoing revenue stream by purchasing our consumables. We plan to focus our commercial efforts on: (i) expanding the installed base of our G4 Integrated Solution and PX Integrated Solution across a wide array of customer segments; and (ii) driving applications, scale of experimentation and discoveries that lead to increasing utilization of our integrated platforms by our customers. Similar to our strategy of developing purpose-built products based on feedback from potential customers, we also plan to develop a service and support organization that will focus on creating an unparalleled customer experience. We believe in the value of creating new customers while expanding utilization of existing customers through the sale of purpose-built products and the establishment of customer loyalty.

We are in the process of building out our commercial organization and we expect to have direct commercial staff in sales, customer success, technical support, field service and market development functions. Throughout our commercial rollout, we will need to scale each function within our commercial organization in anticipation of demand and with the intent to deliver exceptional customer experience. We believe that coupling customer experience with a transformative integrated solution will allow us to deliver substantial value to our customers, build long-term customer loyalty and enhance our competitive differentiation.

We expect to initially target customers in North America through direct sales and customer support organizations. We also plan to expand outside North America to sell and support our products in the European Union, United Kingdom, Asia Pacific and Japan, and expect to expand access to our products in other geographies through well established distribution networks.

The majority of our consumable products and instruments are manufactured in-house at our facilities in La Jolla, California. These manufacturing operations include: flow cell surface synthesis and flow cell assembly, reagent formulation and cartridge filling, kit assembly and packaging as well as analytical and functional quality control testing. We obtain some components of our consumables from third-party suppliers. While some of these components are sourced from a single supplier, we have qualified second sources for several of our critical components including reagents, flow cells, optics and oligonucleotides. We believe that having dual sources for our components helps reduce the risk of a production delay caused by a disruption in the supply of a critical component.

## **Corporate and Financial Overview**

Since we were incorporated in 2016, we have devoted substantially all of our resources to research and product development activities, initiating our commercialization plans, establishing and maintaining our intellectual property portfolio, hiring personnel, raising capital, building our commercial infrastructure and providing general and administrative support for these activities. Since our incorporation, we have incurred significant losses and negative cash flows from operations. During the nine months ended September 30, 2021, we incurred a net loss of \$79.0 million and used \$36.0 million of cash in our operations. As of September 30, 2021, we had an accumulated deficit of \$132.1 million. We expect to continue to incur significant and increasing losses and do not expect positive cash flows from operations for the foreseeable future, and our net losses may fluctuate significantly from period to period depending on the timing of and expenditures on our planned commercialization and research and development activities.

On June 1, 2021, we closed our initial public offering (“IPO”) in which we sold 11,730,000 shares of our common stock (which includes 1,530,000 shares that were offered and sold pursuant to the full exercise of the underwriters’ option to purchase additional shares) at a public offering price of \$22.00 per share, resulting in net proceeds of approximately \$237.2 million after deducting offering costs, underwriting discounts and commissions of \$20.9 million.

From the date of our incorporation through September 30, 2021, we have financed our operations primarily through private placements of convertible preferred stock and convertible promissory notes and the net proceeds from our IPO. We have raised aggregate net proceeds of approximately \$436.9 million, net of issuance costs, including the \$130.5 million we raised through the issuance of convertible promissory notes in February 2021 (the “2021 Convertible Notes”). As of September 30, 2021, we had cash, cash equivalents and short-term investments of \$357.0 million.

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

- continue to develop and then commercialize our G4 Integrated Solution and planned PX Integrated Solution;
- attract, hire and retain qualified personnel;
- expand our sales, marketing, service, support and distribution infrastructure to support our commercialization plans and engage in commercialization activities;
- build-out and expand our in-house manufacturing capabilities and engage in larger scale manufacturing activities;
- continue to engage in research and development of other products and enhancements;
- implement operational, financial and management information systems;

- obtain, maintain, expand and protect our intellectual property portfolio; and
- operate as a public company.

### **Key Factors Affecting Our Performance**

We believe that our financial performance will be driven primarily by the factors below. While each of these factors presents significant opportunities for our business, they also pose important challenges that we must successfully address in order to grow our business and improve our results of operations. Our ability to successfully address the factors below is subject to various risks and uncertainties, including those described under the section titled “Risk Factors” elsewhere in this report.

#### ***Commercial adoption of our G4 Integrated Solution and planned PX Integrated Solution***

Our financial performance will be driven by, and a key factor to our future success will be, the rate of commercial adoption of our G4 Integrated Solution and planned PX Integrated Solution. We plan to drive customer adoption, beginning with our completed beta pilot program and ongoing early access program, to generate clear use-cases and peer-reviewed publications that illustrate our product performance claims and value proposition. Following our beta pilot and early access programs, we plan to commercially launch through a direct sales and marketing organization in the United States and to sell and support our products in the European Union, United Kingdom, Asia Pacific and Japan, either through direct sales or through established distribution networks. Throughout our commercial rollout, we aim to grow our sales and marketing team to foster deep customer relationships initially with customers running our G4 Integrated Solution and to establish and grow distribution networks capable of deploying our G4 Integrated Solution in select areas of the world. We also plan to offer different access options, including capital sale and lease options, for the G4 Integrated Solution to meet each customer’s unique needs. As a result of this effort, we will aim to increase the installed base of our G4 Integrated Solution and our planned PX Integrated Solution.

#### ***Utilization by our customers of our G4 Integrated Solution and planned PX Integrated Solution***

The utilization of our integrated solutions and the corresponding purchases of consumables and other products and services will represent a source of potential recurring revenue from our customers. We plan to drive utilization of our G4 Integrated Solution and planned PX Integrated Solution by engaging with customers to help them advance through the adoption cycle from early stage validation to integration of our integrated solutions with existing NGS workflows with plug and play interoperability. As our integrated solutions advance toward becoming fully integrated within customer workflows, we believe customers will utilize more of our consumables and other products and services, thus driving recurring revenue.

#### ***Expansion of our G4 Integrated Solution and PX Integrated Solution beyond initial applications***

The rate of growth of our revenue will rely in part on our ability to expand our market opportunity. We aim to continually innovate and develop new products, applications, workflows and analysis tools that may potentially lead to new end markets, applications and business models. We believe that the capabilities offered by our integrated solutions and future products may potentially lead to additional or complementary addressable markets and may expand our market opportunity.

#### ***Revenue mix between our instruments and consumables, and gross margin***

Any revenue we generate will be derived from sales of our instruments, consumables and services. As our customers begin adopting our G4 Integrated Solution, we expect our revenue will be derived principally from sales of such instruments. As we drive utilization of our G4 Integrated Solution, and customers begin utilizing more of our consumables, we estimate that the portion of our revenue from sales of our consumables will grow over time. We expect the revenue contribution from our consumables to vary on a quarterly basis due to several factors, including the timing and number of publications of scientific papers demonstrating the value of our consumables, the availability of grants to fund research, budgetary timing and our introduction of new product features and new consumables offerings. Additionally, we expect the mix and variance of sales between our instruments and consumables to cause our gross margin to vary on a quarterly basis.

#### ***Rate of investment in our growth***

As we commercially launch and grow sales of our G4 Integrated Solution and, once developed and commercially launched, our PX Integrated Solution, we expect to continue investing in our manufacturing capabilities and commercial infrastructure. Additionally, we plan to further invest in research and development as we hire employees with the necessary scientific and technical backgrounds to enhance and expand our existing products and help us bring new products to market, and expect to incur additional research and development expenses as a result. We also plan to invest in sales and marketing activities and expect to incur additional general and administrative expenses as we support our growth and our operations as a publicly traded company.

#### ***Expansion of our geographic presence***

We are initially building our commercial infrastructure to sell and support our products directly in the United States and Canada.

We also have plans to sell and support our products in the European Union, United Kingdom, Asia Pacific and Japan, either through direct sales or through well established distribution networks and expect to expand access to our products in other geographies through distributors. We expect to incur expenses as we expand our geographic presence and generate revenue either through direct sales or through distribution networks. Our expenses and revenue will fluctuate depending on the extent to which we pursue direct sales or distribution arrangements outside the United States and Canada.

### **Columbia License Agreement and Sponsored Research Agreement**

In August 2016, we entered into an Exclusive License Agreement (the “License Agreement”) with the Trustees of Columbia University in the City of New York (“Columbia”). The License Agreement includes a number of diligence obligations that require us to use commercially reasonable efforts to research, discover, develop and market Patent Products and/or Other Products (as defined in the License Agreement) by certain dates. Under the License Agreement, we pay an annual license fee that increases each year, until it reaches a low six digit fee for the fifth year, and for each subsequent year, for so long as the License Agreement remains in force. For any products within the scope of the License Agreement that we commercialize, we are required to pay royalties ranging from low to mid-single digits on net sales of Patent Products and low single digit royalty rates on net sales of Other Products. We can credit our yearly annual license fee against any yearly royalty fees payable to Columbia. Additionally, if we receive any income in connection with any sublicenses, we must pay Columbia a high single digit percentage of that income. Finally, the License Agreement provides for payments to Columbia based on our achievement of certain development and commercialization milestones, which could total up to \$3.9 million over the life of the License Agreement. As of September 30, 2021, we have paid an aggregate of \$0.1 million to Columbia pursuant to the terms of the License Agreement.

We do not believe that our G4 or PX Instruments or the associated consumables, as we presently intend to commercialize them, fit within the definitions of Patent Products or Other Products as defined in the License Agreement. As a result, we do not believe that we will be required to make milestone payments or pay royalties on sales of these products. However, in the future, we may decide to incorporate features covered by one or more licensed patents or directly use or incorporate materials and/or technical information provided by Columbia, such that we would incur milestone and royalty obligations under the License Agreement.

We are currently in discussions with Columbia related to the application of the License Agreement and our efforts to satisfy the diligence obligations under the License Agreement. There is no assurance that Columbia will agree with our interpretation of the License Agreement or our payment obligations thereunder or agree that we have complied with our other obligations under the License Agreement.

In addition to the License Agreement, the Company entered into a sponsored research agreement to fund a research program with Columbia. The program ended in 2019.

### **COVID-19 Pandemic**

We are continuing to assess the impact of the COVID-19 pandemic on our current and future business and operations, as well as on our industry and the healthcare system. The impact of the COVID-19 pandemic on any of the foregoing could harm our operations and we cannot anticipate all the ways in which we could be adversely impacted.

### **Components of Our Results of Operations**

#### ***Revenue***

We have not generated any revenue from product sales to date and may not do so in the future.

#### ***Operating Expenses***

##### ***Research and Development***

Research and development expenses consist primarily of: salaries, payroll taxes, employee benefits and stock-based compensation for personnel engaged in research and development activities; fees paid to consultants; license fees paid to third parties for use of their intellectual property; laboratory supplies and development compound materials; and allocated facilities and depreciation costs. All research and development costs are charged to expense as incurred.

We plan to continue to increase our investment in our research and development efforts related to our product development pipeline and our proprietary technology, including our G4 Integrated Solution and planned PX Integrated Solution. Therefore, we expect our research and development expenses will increase as we incur expenses associated with hiring additional personnel, purchasing supplies and materials and the allocation of facility expense associated with the ongoing build-out of our expansion facilities to support our research and development efforts.

##### ***Selling, General and Administrative***

Selling, general and administrative expenses consist primarily of: salaries, payroll taxes, employee benefits and stock-based compensation for personnel in our executive management, finance, administration and human resources functions; professional service fees, including for legal, accounting, patent, auditing and other services; allocated facilities and depreciation costs; and other costs to support our operations.

We plan to continue to increase our investment in our personnel as we grow. We also expect to incur additional costs as a result of operating as a public company, including costs of legal, audit, accounting, regulatory and tax compliance services, director and officer insurance costs, and investor and public relations costs. As a result, we expect our selling, general and administrative expenses will increase in future periods.

### **Other Income and Expenses**

#### **Interest Income**

Interest income consists of interest earned on cash, cash equivalents and short-term investments primarily from holdings in corporate notes and government agency notes.

#### **Interest Expense**

Interest expense consists of interest related to our Loan Agreement with Silicon Valley Bank (the “Loan Agreement”), including amortization of the debt issuance cost.

#### **Change in Fair Value of 2021 Convertible Notes**

Prior to the IPO, we accounted for the 2021 Convertible Notes in accordance with the provisions of Accounting Standards Codification (“ASU”) 480, *Distinguishing Liabilities from Equity* and ASU 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity’s Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity’s Own Equity*. We adjusted the carrying value of the liability for the 2021 Convertible Notes to its estimated fair value at the end of each reporting period through conversion, with increases in fair value recorded as other income or expense in the statements of operations.

#### **Change in Fair Value of Warrant Liability**

Prior to the IPO, we accounted for the warrant for preferred stock (the “SVB Warrant”, see Note 3 to our condensed financial statements included in Item 1) in accordance with the provisions of Accounting Standards Codification 480, *Distinguishing Liabilities from Equity*, which requires that warrants for the purchase of shares in contingently redeemable instruments be accounted for as liabilities. We adjusted the carrying value of such warrant liability to its estimated fair value at the end of each reporting period through conversion, with increases or decreases in fair value recorded as other income or expense in the statements of operations.

### **Results of Operations**

#### **Comparison of the Three Months Ended September 30, 2021 and 2020**

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

	<b>Three Months Ended September 30,</b>		<b>\$ Change</b>	<b>% Change</b>
	<b>2021</b>	<b>2020</b>		
	<b>(in thousands)</b>			
Operating expenses:				
Research and development	\$ 8,910	\$ 6,080	\$ 2,830	47%
Selling, general and administrative	8,551	1,698	6,853	404%
Loss from operations	\$ (17,461)	\$ (7,778)	\$ (9,683)	-124%
Interest income	91	76	15	20%
Interest expense	(234)	(202)	(32)	16%
Change in fair value of warrant liability	-	(49)	49	-100%
Other income (expense)	(7)	20	(27)	-135%
Net loss	\$ (17,611)	\$ (7,933)	\$ (9,678)	-122%

#### **Research and Development Expense**

The following table summarizes our research and development expense for the periods indicated:

	<b>Three Months Ended September</b>		<b>\$ Change</b>	<b>% Change</b>
	<b>30,</b>			
	<b>2021</b>	<b>2020</b>		
	<b>(in thousands)</b>			
Research and development	\$ 8,910	\$ 6,080	\$ 2,830	47%

Research and development expense increased by \$2.8 million, or 47%, in the three months ended September 30, 2021 compared to the same period in 2020. The increase was primarily due to an increase of \$2.1 million in employee compensation costs, including \$0.9 million of stock-based compensation, to support the development efforts of our G4 Integrated Solution and our beta development for the PX Integrated Solution. Other increases include \$0.3 million related to product testing and supplies used for in-house research and \$0.1 million related to the expansion of our facilities.

***Selling, General and Administrative Expense***

The following table summarizes our selling, general and administrative expenses for the periods indicated:

	<b>Three Months Ended September</b>		<b>\$ Change</b>	<b>% Change</b>
	<b>30,</b>			
	<b>2021</b>	<b>2020</b>		
	<b>(in thousands)</b>			
Selling, general and administrative	\$ 8,551	\$ 1,698	\$ 6,853	404%

Selling, general and administrative expense increased by \$6.9 million, or 404%, in the three months ended September 30, 2021 compared to the same period in 2020. The increase was primarily due to a \$4.2 million increase in employee compensation costs, including \$1.7 million of stock-based compensation, resulting from hiring additional personnel to support our growth and prepare for future commercialization. Other increases include \$2.1 million in professional and consulting fees related to insurance, legal, audit and other costs associated with becoming a public company, as well as \$0.4 million related to expansion of our facilities.

### Other Income (Expense)

The following table summarizes our other income (expense) for the periods indicated:

	<b>Three Months Ended September 30,</b>		<b>\$ Change</b>	<b>% Change</b>
	<b>2021</b>	<b>2020</b>		
	<b>(in thousands)</b>			
Interest income	\$ 91	\$ 76	15	20 %
Interest expense	(234)	(202)	(32)	16 %
Change in fair value of warrant liability	-	(49)	49	-100 %
Other income (expense)	(7)	20	(27)	-135 %
<b>Total</b>	<b>(150)</b>	<b>(155)</b>	<b>5</b>	<b>-3 %</b>

Other expense was \$0.2 million during the three months ended September 30, 2021 and was consistent with the same period in 2020.

### Comparison of the Nine Months ended September 30, 2021 and 2020

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

	<b>Nine Months Ended September 30,</b>		<b>\$ Change</b>	<b>% Change</b>
	<b>2021</b>	<b>2020</b>		
	<b>(in thousands)</b>			
<b>Operating expenses:</b>				
Research and development	\$ 23,200	\$ 15,431	\$ 7,769	50 %
Selling, general and administrative	18,406	4,518	13,888	307 %
Loss from operations	\$ (41,606)	\$ (19,949)	\$ (21,657)	109 %
Interest income	223	444	(221)	-50 %
Interest expense	(654)	(503)	(151)	30 %
Change in fair value of convertible promissory notes	(35,199)	-	(35,199)	100 %
Change in fair value of warrant liability	(2,180)	(49)	(2,131)	4,349 %
Other income (expense)	405	24	381	1,588 %
<b>Net loss</b>	<b>(79,011)</b>	<b>(20,033)</b>	<b>(58,978)</b>	<b>294 %</b>

### Research and Development Expense

The following table summarizes our research and development expense for the periods indicated:

	<b>Nine Months Ended September 30,</b>		<b>\$ Change</b>	<b>% Change</b>
	<b>2021</b>	<b>2020</b>		
	<b>(in thousands)</b>			
Research and development	\$ 23,200	\$ 15,431	\$ 7,769	50 %

Research and development expense increased by \$7.8 million, or 50%, in the nine months ended September 30, 2021 compared to the same period in 2020. The increase was primarily due to an increase of \$5.2 million in employee compensation costs, including \$1.6 million of stock-based compensation, to support the development efforts of our G4 Integrated Solution and our beta development for the PX Integrated Solution. Other increases include \$0.8 million in laboratory materials, supplies and reagents used for in-house research, \$0.7 million related to the expansion of our facilities and \$0.3 million for consulting fees for research and development activities.

### Selling, General and Administrative Expense

The following table summarizes our selling, general and administrative expense for the periods indicated:

	<b>Nine Months Ended September 30,</b>		<b>\$ Change</b>	<b>% Change</b>
	<b>2021</b>	<b>2020</b>		
	<b>(in thousands)</b>			
Selling, general and administrative	\$ 18,406	\$ 4,518	\$ 13,888	307 %

Selling, general and administrative expenses increased by \$13.9 million, or 307%, in the nine months ended September 30, 2021 compared to the same period in 2020. The increase was primarily due to a \$9.1 million increase in employee compensation costs, including \$3.9 million of stock-based compensation costs, as a result of hiring personnel to support our growth and prepare for future commercialization. Other increases include \$2.8 million in professional and consulting fees related to insurance, legal, audit, marketing services, and other costs associated with becoming a public company.

#### **Other Income (Expense)**

The following table summarizes our other income (expense) for the periods indicated:

	<b>Nine Months Ended</b>		<b>\$ Change</b>	<b>% Change</b>
	<b>2021</b>	<b>2020</b>		
	<b>(in thousands)</b>			
Interest income	\$ 223	\$ 444	\$ (221)	-50 %
Interest expense	(654)	(503)	(151)	30 %
Change in fair value of convertible promissory notes	(35,199)	-	(35,199)	100 %
Change in fair value of warrant liability	(2,180)	(49)	(2,131)	4,349 %
Other income (expense)	405	24	381	1,588 %
Total	<u>(37,405)</u>	<u>(84)</u>	<u>(37,321)</u>	<u>44,430 %</u>

Other expense increased by \$37.3 million in the nine months ended September 30, 2021 compared to the same period in 2020 primarily due to the increase in the fair value of our convertible promissory notes of \$35.2 million and the increase in the fair value of the warrant liability by \$2.1 million, each prior to their conversion in connection with the IPO.

#### **Liquidity and Capital Resources**

Since we were incorporated in 2016, we have devoted substantially all of our resources to research and product development activities, initiating our commercialization plans, establishing and maintaining our intellectual property portfolio, hiring personnel, raising capital, building our commercial infrastructure and providing general and administrative support for these activities. Since our incorporation, we have not generated any revenues from product sales and have incurred significant operating losses and negative cash flows from operations. From incorporation in June 2016 through September 30, 2021, we have financed our operations primarily through private placements of convertible preferred stock and convertible promissory notes and the net proceeds from our IPO. We expect to continue to incur significant and increasing losses and do not expect positive cash flows from operations for the foreseeable future, and our net losses may fluctuate significantly from period to period depending on the timing of and expenditures on our planned commercialization and research and development activities. In particular, we expect to incur increasing costs in the near term in connection with the commercial launch of our G4 Integrated Solution, which will include, among others, increasing our sales and marketing and other commercialization efforts to drive market adoption of our G4 Integrated Solution and scaling up our manufacturing and customer support capabilities. During the nine months ended September 30, 2021, we incurred a net loss of \$79.0 million and used \$36.0 million of cash in operations. As of September 30, 2021, we had an accumulated deficit of \$132.1 million. As of September 30, 2021, we had cash, cash equivalents and short-term investments of \$357.0 million.

Based on our current operating plan, we believe our existing cash, cash equivalents and short-term investments will enable us to fund our planned operations for at least 12 months from the issuance date this report. We have based our estimate of capital requirements on assumptions that may prove to be incorrect and as we continue to face challenges and uncertainties, our available capital resources may be consumed more rapidly than currently expected due to a variety of factors, including: (i) delays in execution of or a significant expansion of our commercialization plans; (ii) changes we may make to the business that affect ongoing operating expenses; (iii) changes we may make in our business or commercialization strategy; (iv) changes we may make in our research and development spending plans; (v) actions taken by our competitors; (vi) the impact of the COVID-19 pandemic; (vii) other items affecting our forecasted level of expenditures and use of cash resources including potential acquisitions; and (viii) other factors described in the section titled "Risk Factors" elsewhere in this report.

We may need to seek additional financing in the future to support our operations, research and development activities and

commercialization plans. If we are not able to generate sufficient revenue to finance our cash requirements or raise additional capital or enter into financing agreements or arrangements when required on favorable terms, or at all, we may have to delay, reduce the scope of, or discontinue one or more development programs, delay potential commercialization or reduce the scope of sales or marketing activities and pursue other cost cutting measures, including the reduction of headcount, scope of operations and planned capital expenditures, which may have a material adverse effect on our business, results of operations, financial condition and/or ability to fund our scheduled obligations on a timely basis or continue as a going concern. We cannot assure you that we will ever be profitable or generate positive cash flow from operating activities or that, if we achieve profitability, we will be able to sustain it.

### **Cash Flows**

The following table sets forth the primary sources and uses of cash, cash equivalents and restricted cash for each of the periods presented below:

	<b>Nine Months Ended September 30,</b>	
	<b>2021</b>	<b>2020</b>
	<b>(in thousands)</b>	
Net cash provided by (used in)		
Operating activities	\$ (36,002)	\$ (17,887)
Investing activities	(107,536)	16,350
Financing activities	371,318	7,487
Net increase in cash and cash equivalents	<u>\$ 227,780</u>	<u>\$ 5,950</u>

### **Operating Activities**

During the nine months ended September 30, 2021, cash used in operating activities was \$36.0 million attributable to a net loss of \$79.0 million, offset by non-cash charges of \$46.1 million and by a net change in our working capital of \$3.1 million. Non-cash charges primarily consisted of a \$35.2 million change in the fair value of the 2021 Convertible Notes, a \$2.2 million change in the fair value of warrants and \$6.3 million of stock-based compensation expense.

During the nine months ended September 30, 2020, cash used in operating activities was \$17.9 million attributable to a net loss of \$20.0 million, offset by non-cash charges of \$1.5 million and by a net change in our working capital of \$0.7 million. Non-cash charges primarily consisted of stock-based compensation expense of \$0.7 million and depreciation expense of \$0.4 million.

### **Investing Activities**

During the nine months ended September 30, 2021, cash used in investing activities was \$107.5 million, which related to purchases of available-for-sale securities of \$146.1 million, net of proceeds from maturities of available-for-sale securities of \$41.6 million, in addition to \$3.0 million in payments related to purchases of property and equipment.

During the nine months ended September 30, 2020, cash provided by investing activities was \$16.4 million, which related to maturities of available-for-sale securities of \$23.6 million, net of purchases of \$6.1 million, in addition to \$0.8 million in payments related to purchases of property and equipment.

### **Financing Activities**

During the nine months ended September 30, 2021, cash provided by financing activities was \$371.3 million, which was primarily related to the net proceeds from our IPO of \$237.2 million, proceeds from the issuance of the 2021 Convertible Notes of \$130.5 million and cash received related to exercise of stock options of \$3.5 million.

During the nine months ended September 30, 2020, cash provided by financing activities was \$7.5 million, which was primarily related to proceeds from our long-term debt issuance.

### **Indebtedness**

In November 2019, we entered into a loan and security agreement with Silicon Valley Bank (“SVB”) pursuant to which SVB agreed to lend to us up to \$15.0 million in a series of term loans (the “2019 SVB Loan”). Contemporaneously, we borrowed \$2.5 million in the first of three draw-downs available under the 2019 SVB Loan. In March 2020, we borrowed an additional \$7.5 million as a second draw. The 2019 SVB Loan was to mature on September 1, 2023 and bore interest at an annual rate equal to the greater of (a) 0.65% above the prime rate or (b) 5.90%. Payment on the 2019 SVB Loan was for interest only through September 30, 2021. In addition, a final payment equal to the original principal amount of each advance multiplied by 5.50% was to be due on the maturity date. In connection with the 2019 SVB Loan, SVB entered into a the SVB Warrant agreement with us to purchase shares of Series B convertible preferred stock at an exercise price of \$2.3228 per share.

On September 30, 2021, we refinanced our 2019 SVB Loan. In connection with the refinancing, we entered into an Amended and Restated Loan and Security Agreement (the “Amended Agreement” or “2021 SVB Loan”, together with the 2019 SVB Loan, the “SVB Loans”) with SVB. The Amended Agreement provides for term loans in an aggregate principal amount of up to \$35.5 million to be delivered in three tranches. The tranches consist of: (i) a term loan advance to us in an aggregate principal amount of \$10.5 million on the loan closing date (the “First Tranche”); (ii) an additional term loan advance available to us through September 30, 2022 in an aggregate principal amount of \$15.0 million; and (iii) subject to SVB’s approval, our right to request that SVB make an additional term loan advance in an aggregate principal amount of \$10.0 million. The proceeds from the First Tranche were used to repay in full the existing indebtedness under the 2019 SVB Loan. The 2021 SVB Loan matures on September 1, 2026 and bears interest at an annual rate equal to the greater of (a) 0.75% plus the prime rate as reported in *The Wall Street Journal* and (b) 4.00%. The 2021 SVB Loan has an initial interest-only period of 36 months. In addition, a final payment (“Final Payment Fee”) equal to the original principal amount of each advance multiplied by 4.00% will be due on the maturity date.

The Amended Agreement was accounted for as a debt modification, rather than an extinguishment, based on a comparison of the present value of the cash flows under the terms of the debt immediately before and after the amendment, which resulted in a change of less than 10%. Unamortized debt issuance costs as of the date of modification and incremental issuance costs incurred in connection with the Amended Agreement will be amortized to interest expense using the effective interest method over the repayment term.

We are subject to customary affirmative and restrictive covenants under the Amended Agreement. Our obligations under the Amended Agreement are secured by a first priority security interest in substantially all of our current and future assets, other than intellectual property. We have agreed not to encumber our intellectual property assets, except as permitted by the Amended Agreement. The Amended Agreement provides for events of default customary for term loan facilities of this type, including but not limited to: non-payment; breaches or defaults in the performance of covenants or representations and warranties; bankruptcy and other insolvency events; and the occurrence of a material adverse change as defined in the Amended Agreement. After the occurrence of an event of default, SVB may, among other remedies, accelerate payment of all obligations

### **Critical Accounting Policies, Significant Judgments and Use of Estimates**

Our management’s discussion and analysis of our financial condition and results of operations is based on our condensed financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”). The preparation of financial statements requires us to make estimates and judgements that affect the reported amounts of assets, liabilities, costs and expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Changes in estimates are reflected in reported results for the period in which they become known. Actual results could differ significantly from the estimates made by our management.

There have been no material changes to our critical accounting policies and estimates from those disclosed in our financial statements and the related notes and other financial information included in our Prospectus for our IPO filed pursuant to Rule 424(b)(4) under the Securities Act with the SEC on May 24, 2021.

### **Recent Accounting Pronouncements**

A description of changes in recent accounting pronouncements that may potentially impact our financial position, results of operations or cash flows is disclosed in Note 2 to our financial statements included elsewhere in this report.

### **Off-Balance Sheet Arrangements**

Since our inception, we have not engaged in any off-balance sheet arrangements, as such term is defined in the rules and regulations of the Securities and Exchange Commission (“SEC”).

### **JOBS Act**

We are an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, as amended (the “JOBS Act”). We will remain an emerging growth company until the earliest to occur of: (i) the last day of the fiscal year in which we have more than \$1.07 billion in annual gross revenue; (ii) the date we qualify as a “large accelerated filer” as defined in Rule 12b-2 under the Exchange Act, with at least \$700 million of equity securities held by non-affiliates; (iii) the issuance, in any three-year period, by us of more than \$1.0 billion in non-convertible debt securities; or (iv) December 31, 2026. As a result of this status, we have taken advantage of certain exemptions from various reporting requirements in this report that are applicable to other publicly traded entities that are not emerging growth companies and may elect to take advantage of other exemptions from reporting requirements in our future filings with the SEC. In particular, in this report, these exemptions include:

- the option to present only two years of audited financial statements and only two years of Management’s Discussion and Analysis of Financial Condition and Results of Operations;
- not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act of 2002, as amended;
- not being required to submit certain executive compensation matters to stockholder advisory votes, such as “say-on-pay,” “say-on-frequency,” and “say-on-golden parachutes;” and
- not being required to disclose certain executive compensation-related items such as the correlation between executive compensation and performance and comparisons of the chief executive officer’s compensation to median employee compensation.

As a result, we do not know if some investors will find our common stock less attractive. The result may be a less active trading market for our common stock, and the price of our common stock may become more volatile.

In addition, Section 107 of the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards, delaying the adoption of these accounting standards until they would apply to private companies. We have elected to avail ourselves of this exemption and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for private companies. Accordingly, the information contained herein may be different than the information you receive from other public companies.

### **Item 3. Quantitative and Qualitative Disclosures about Market Risk**

We are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate risk, foreign currency exchange rate risk and inflation risk as follows:

#### **Interest Rate Risk**

We had cash, cash equivalents and short-term investments of \$357.0 million and \$26.9 million as of September 30, 2021 and December 31, 2020, respectively. The goals of our investment policy are liquidity and capital preservation, and we do not enter into investments for trading or speculative purposes. 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, cash equivalents and short-term investments. Additionally, the interest rate for borrowings under our 2021 SVB Loan is variable. The principal outstanding under our 2021 SVB Loan as of September 30, 2021 is \$10.5 million. We believe a hypothetical 10% increase or decrease in interest rates during any of the periods presented would not have had a material impact on our financial statements included elsewhere in this report.

#### **Foreign Currency Exchange Risk**

All of our employees and our operations are currently located in the United States and our expenses and substantially all of our payment obligations are denominated in and have been satisfied with U.S. dollars. There was no material foreign currency risk for the three months ended September 30, 2021 and year ended December 31, 2020. In the future, our sales may be denominated in foreign currencies, and, to the extent they are, we will be subject to foreign currency transaction gains or losses. To date, we have had no material foreign currency transaction gains and losses, and we have no formal hedging program with respect to foreign currency. We believe a hypothetical 10% increase or decrease in exchange rates during any of the periods presented would not have a material effect on our financial statements included elsewhere in this report.

#### **Effects of Inflation**

Inflation generally affects us by increasing our cost of labor and research, manufacturing and development costs. We believe that inflation has not had a material effect on our financial statements included elsewhere in this report.

### **Item 4. Controls and Procedures**

#### **Evaluation of Disclosure Controls and Procedures**

Our management, with the participation of our Principal Executive Officer and our Principal Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act of 1934, as amended (“Exchange Act”)) as of the end of the period covered by this report. Based on that evaluation, our Principal Executive Officer and Principal Financial Officer concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or

submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and to provide reasonable assurance that such information is accumulated and communicated to our management, including our Principal Executive Officer and Principal Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

### **Changes in Internal Control Over Financial Reporting**

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the period covered by this report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Only a small number of our employees are working remotely and we have not experienced any material impact on our internal control over financial reporting due to the COVID-19 pandemic.

### **Inherent Limitations on Effectiveness of Controls**

Our management, including our Principal Executive Officer and Principal Financial Officer, do not expect that our disclosure controls or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, 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. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can 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 also 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, over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

## 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 become involved in legal proceedings arising in the ordinary course of our business. Regardless of outcome, litigation can have an adverse impact on us due to defense and settlement costs, diversion of management resources, negative publicity, reputational harm and other factors.

## Item 1A. Risk Factors

*Investing in our common stock is speculative and involves a high degree of risk. You should consider and read carefully all of the risks and uncertainties described below, together with all of the other information contained in this report, including the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our financial statements and the related notes, before investing in our common stock. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results. If any of the following risks occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment. This report also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of a number of factors, including the risks described below. See “Special Note Regarding Forward-Looking Statements” elsewhere in this report.*

### Risks Related to Our Business and Industry

***Our limited operating history makes it difficult to evaluate our future prospects and the risks and challenges we may encounter.***

We operate in a highly competitive market characterized by rapid technological advances, frequent new product introductions, evolving industry standards and changing customer preferences. Our limited operating history makes it difficult to evaluate our future prospects and our ability to respond to our competitors, changes in our market and the risks and challenges we may encounter as we expand our business operations. If we fail to address the risks, uncertainties and difficulties that we face, including those described elsewhere in this “Risk Factors” section, our business, financial condition and results of operations could be adversely affected. We have encountered in the past, and will encounter in the future, risks and uncertainties frequently experienced by companies developing and introducing new products in competitive and rapidly changing markets. 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 and uncertainties successfully, our results of operations could differ materially from our expectations, and our business, financial condition and results of operations could be adversely affected.

***We have incurred significant losses since inception, we expect to incur significant losses in the future and we may not be able to generate sufficient revenue to achieve and maintain profitability.***

We are a pre-revenue life science technology company and have incurred significant losses since we were formed in 2016. We expect to continue to incur significant losses for the foreseeable future as we expand our business operations, continue to develop our products and implement our business plans and strategies. Our net loss for the nine months ended September 30, 2021 was \$79.0 million and for year ended December 31, 2020 was \$27.9 million. As of September 30, 2021, we had an accumulated deficit of \$132.1 million. We expect that our losses will continue for the foreseeable future as we continue to invest significant additional funds toward ongoing research and development and toward the timely commercialization of our products. We have experienced these losses and accumulated deficit primarily due to the investments we have made in developing our proprietary technologies and products, building our team and manufacturing capabilities and preparing for the commercial launch of our first product, the G4 Integrated Solution. Over the next several years, we expect to continue to incur significant expenses as we continue our research and development activities, finalize the development of our G4 and PX Integrated Solutions, continue to build our sales and marketing organization and increase our manufacturing and commercialization capabilities. These efforts may prove to be more costly, or take longer, than we currently anticipate. Additionally, we may encounter unforeseen expenses, product development or manufacturing delays, declines in revenue or other unknown factors that may result in losses in future periods. We have not generated any product revenue, and we may never generate revenue sufficient to offset our expenses, or at all. In addition, as a public company, we will incur significant legal, accounting, administrative, insurance and other expenses that we did not incur as a private company. To date, we have financed our operations principally from the sale of convertible preferred stock, convertible notes and the incurrence of other indebtedness. There can be no assurance that our revenue and gross profit will increase sufficiently such that our net losses decrease, or that we attain profitability, in the future. Further, our limited operating history makes it difficult to effectively plan for and model our operating expenses and our ability to generate revenue. Our ability to achieve and then sustain profitability is based on numerous factors, many of which are beyond our control, including the impact of market acceptance of our products, product development results and timing, offerings or actions taken by our competitors, our market penetration and margins and current and future litigation. We may never be able to generate sufficient revenue to achieve or sustain profitability, which could negatively impact the value of our common stock.

***We are a pre-revenue life science technology company in the development stage and have no history commercializing our products or technology, which makes it difficult to evaluate our prospects and predict our future performance.***

We have not finalized the development or commercialized any of our products or technology and have not generated any revenue to date. There can be no assurance that we will be able to generate sufficient revenue in the future to support our operations and plans. Our operations to date have been focused on developing our technologies and products, including our G4 Integrated Solution. We

have completed our beta pilot program for our G4 Integrated Solution, are underway with our early access program, and anticipate a commercial launch of our G4 Integrated Solution by the end of 2021 with intentions for units to ship in the first half of 2022. The performance of our integrated solutions in our beta pilot program and early access program may not be indicative of the performance our customers experience following commercial launch and may prove to be inaccurate. There can be no assurance that we will be able to timely finalize the development of or achieve market acceptance for our G4 Integrated Solution in the future. In particular, it is possible that customers in the early access program may form negative impressions of our G4 Integrated Solution, encounter errors in results or otherwise believe that our G4 Integrated Solution does not compare favorably to competing systems. Further, we have not finalized the development of our G4 Integrated Solution or manufactured our G4 Integrated Solution in commercial quantities, conducted sales and marketing activities at scale or managed customer support at the commercial level. Consequently, predictions about our future success or viability are highly uncertain and hard to predict as a result of our limited operating history, the development stage of our products and our lack of any history commercializing our technologies or 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.

Further, we will eventually need to transition from a company with a focus on research and development to a company capable of supporting both research and development and robust manufacturing and commercial activities, and we may not be successful in such a transition. We have encountered in the past, and will encounter in the future, risks and uncertainties, delays and scientific setbacks frequently experienced by development stage companies with limited operating histories in competitive and rapidly changing industries, such as the genomics industry. If our assumptions regarding these risks and uncertainties, which we use to plan and operate our business, manufacturing and commercialization activities, are incorrect or change, or if we do not address these risks, delays or uncertainties successfully, our results of operations could differ materially from our expectations, and our business, financial condition and results of operations could be adversely affected.

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

We face significant competition in the life sciences technology market. More specifically, the NGS market is characterized by rapid technological changes, frequent new product introductions, established and emerging competition, extensive intellectual property disputes and litigation, price competition, aggressive marketing practices, evolving industry standards and changing customer preferences. Our primary competitors are large publicly-traded companies, or are divisions of large publicly-traded companies, including 10x Genomics Inc., Becton, Dickinson and Company, Bio-Rad Laboratories, Inc., Illumina Inc., MissionBio Inc., Nanosting Technologies, Inc., Oxford Nanopore Technologies Inc., Pacific Biosciences Inc., and Thermo Fisher Scientific Inc. There are other companies, both established and early-stage, that have indicated that they are designing and plan to manufacture and offer NGS technologies and products to our target customers. We also face competition from companies and research institutes developing their own products or applications for omics research. 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.

Our current competitors, including those who are large publicly-traded companies, or are divisions of large publicly-traded companies, enjoy a number of competitive advantages over us, including:

- greater name and brand recognition;
- greater financial and human resources;
- established and trusted commercial relationships with our target customers;
- broader product lines;
- greater pricing flexibility, including the ability to offer significant discounts and to bundle products and services;
- larger sales and customer service forces and more established distributor networks;
- substantial intellectual property portfolios;
- exclusive and/or long-term supply agreements with our target customers;
- approvals with the U.S. Food and Drug Administration (the FDA) that allow our competitors to market their products for additional uses;
- numerous scientific papers and publications supporting their technologies and product claims; and
- better established, larger scale and lower cost manufacturing capabilities.

We cannot assure investors that we can successfully compete with these competitors or that our G4 Integrated Solution, our planned PX Integrated Solution or any other technologies and products we develop can compete favorably with the offerings from such competitors. We also cannot assure investors that we can successfully defend our technologies and products from lawsuits filed by our competitors without significant expenses, the requirement to complete additional product and technology development, potential commercialization delays, or at all. Further, we cannot assure investors that we will be successful in the face of increasing competition from products and technologies introduced by our existing or future competitors, 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 offer products with greater capabilities or at lower costs than ours or that are able to run comparable experiments at a lower total experiment costs. Many of our competitors have also been able to enter into long-term, exclusive agreements with major potential customers, often by offering favorable pricing and other terms. Until these agreements expire, our ability to place our integrated solutions with these customers will be limited. Even after exclusive agreements expire, we may not be able to compete with the terms offered by our competitors in their efforts to extend exclusive relationships with these major potential customers. Any failure to compete effectively could materially and adversely affect our business, financial condition and operating results.

***If our products fail to achieve early customer and scientific acceptance, we may not be able to achieve broader market acceptance for our products, and our revenue and prospects may be harmed.***

We cannot guarantee that customer experiences or reviews of our G4 Integrated Solution from our early access program will be favorable. The customers in these programs may not use our G4 Integrated Solution as we intend, interpret results incorrectly or may experience breakdowns, manufacturing defects, errors or bugs common with beta and early access product introductions, which could negatively impact their perception of our G4 Integrated Solution regardless of its actual capabilities. Initial negative perception of our G4 Integrated Solution by customers in our early access program could irreparably damage our reputation and ability to later successfully commercialize our G4 Integrated Solution, our planned PX Integrated Solution or any of our other future products. Further, the life sciences scientific community is comprised of a small number of early adopters and key opinion leaders (KOLs) who significantly influence the rest of the community and the marketplace in general. The success of life sciences products is due, in large part, to acceptance by the scientific community and their adoption of certain products as best practice in the applicable field of research. The current system of academic and scientific research views publishing in a peer-reviewed journal as a measure of success. 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 peer-reviewed journal publications are a good barometer for the general acceptance of our products as best practices. Ensuring that early adopters and KOLs publish research involving the use of our products is critical to ensuring our products gain widespread acceptance and market growth. Continuing to maintain good relationships with such KOLs is vital to growing the acceptance of our products in the marketplace. If early adopters and KOLs do not favorably describe the use of our products, do not compare our products favorably to existing products and technologies, or negatively describe the use and operation of our products in publications, it may drive potential customers away from our products and prevent broader market acceptance of our products, which could harm our business, financial condition and results of operations.

***We expect to be highly dependent upon revenue generated from the sale of our G4 Integrated Solution, and any delay or failure by us to finalize the development and to begin to commercialize our G4 Integrated Solution will have a substantial adverse effect on our business and results of operations.***

We have completed our beta pilot program for our G4 Integrated Solution, are underway with our early access program, and anticipate a commercial launch of our G4 Integrated Solution and its first associated products by the end of 2021, with intentions for units to ship in the first half of 2022. Our second planned product, the PX Integrated Solution, is still under development, and we do not anticipate the commercial launch of our PX Integrated Solution and its first associated products until 2023. As a result, we expect to generate substantially all of our revenue in the near term from the sale of our G4 Integrated Solution. There can be no assurance that we will finalize the development of our G4 Integrated Solution on a timely basis, that our G4 Integrated Solution will meet our targeted performance metrics, that the G4 Integrated Solution will meet the expectations of our customers or otherwise gain market acceptance, that we can manufacture our G4 Integrated Solution in commercial quantities, that we will be able to successfully commercialize our G4 Integrated Solution or that we will be able to service and maintain our G4 Integrated Solutions that we have sold. Further, there is no assurance that we will be able to successfully complete the development of, or commercialize, our planned PX Integrated Solution, or any other future products or product enhancements we elect to pursue. To date, we have no experience simultaneously designing, testing, manufacturing and selling products and there can be no assurances we will be successful in doing so. In addition, as technologies change in the life sciences research tools marketplace in general, and in the omics technologies marketplace specifically, we will be expected to upgrade or adapt our products in order to keep up with the latest technology. Further, our competitors may offer or develop products or technologies that cause our G4 Integrated Solution or our planned PX Integrated Solution to not be commercially attractive to our customers.

***Our future financial performance will be dependent upon our ability to increase penetration and utilization in our existing markets.***

Our financial performance will be driven by, and a key factor to our future success will be, the rate of commercial adoption of our G4 Integrated Solution and planned PX Integrated Solution. In addition, our financial performance will be dependent on our ability to increase customer utilization of our integrated solutions, and thereby, increase sales of our consumables and any other associated products and services we offer. There is no assurance that we will be successful in demonstrating our product performance claims and value proposition to potential customers. There also is no assurance that our direct sales and marketing organization in the

United States or our direct or distributor sales and marketing efforts in markets outside the United States will drive broad customer adoption of our integrated solutions. Further, we may not be successful in increasing our customers' usage of our integrated solutions, or their associated purchase of our consumables and other products and services. Any failure to establish a broad installed base of our G4 Integrated Solution and our planned PX Integrated Solution solutions among our target customers, or failure to increase the usage of our integrated solutions and the associated sales of our consumables and other products and services, will limit our revenue growth and harm our results of operations and financial performance.

***Our business will depend significantly on research and development spending by academic institutions and other research institutions, and any reduction in spending could limit demand for our products and adversely affect our business, results of operations, financial condition and prospects.***

We plan to initially target customers who are already familiar with genomic analysis, including academic institutions, genomic research centers/core labs and government laboratories, as well as pharmaceutical, clinical research organizations ("CROs"), biotechnology, consumer genomics, commercial molecular diagnostic laboratories and agrigenomics companies. We believe that a substantial amount of our sales revenue in the near term will be generated from sales to academic and other research institutions. Therefore, we expect much of these customers' funding will be, in turn, provided by various state, federal and international governmental agencies. As a result, the demand for our G4 Integrated Solution, our planned PX Integrated Solution and any other product or product enhancements we elect to develop in the future may depend in part 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;
- macroeconomic conditions and the political climate;
- scientists' and customers' opinions of the utility of new products or services;
- researchers' opinions of the utility of our G4 Integrated Solution, our planned PX Integrated Solution or any other product or product enhancements we elect to develop in the future;
- citation of our G4 Integrated Solution and planned PX Integrated Solution 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 offerings or pricing;
- market acceptance of new technologies; and
- market driven pressures to consolidate operations and reduce costs.

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 (the "NIH") have generally increased year-over-year for the last 20 years, but the NIH also experiences occasional year-over-year decreases in appropriations, including as recently as 2013. 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.

***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.***

We have very limited operating history in manufacturing, commercializing and providing customer support for our first product, the G4 Integrated Solution. As a result, our quarterly and annual operating results may fluctuate significantly as we finalize the development of G4 Integrated Solution and begin these new manufacturing, commercialization and customer support activities, 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 finalize the development and successfully manufacture and commercialize our products and technologies, including our G4 Integrated Solution and our planned PX Integrated Solution, on our anticipated timelines and costs;
- the timing and cost of, and level of investment in, research and development, manufacturing and commercialization activities relating to our products and technologies, which may change from time to time;
- the level of demand for any products or product enhancements we are able to commercialize, particularly our G4 Integrated Solution and our planned PX Integrated Solution, which may vary significantly from period to period;
- market acceptance of our products, especially by early adopters and KOLs;
- our ability to drive adoption of our products and technologies, including our G4 Integrated Solution and our planned PX Integrated Solution, in our target markets and our ability to expand into any future target markets;
- the prices at which we will be able to sell our products and technologies;
- our ability to lower the cost of manufacturing our products and product enhancements;
- the availability and cost of components and raw materials;
- actions taken by our competitors, including new product introductions, pricing changes, product bundling and aggressive marketing practices;
- intellectual property disputes and litigation;
- the outcomes of and related rulings in litigation and administrative proceedings in which we may in the future become involved in;
- the operating performance and financial results of our competitors;
- the volume and mix of our sales between our G4 Integrated Solution and our planned PX Integrated Solution and other products and technologies, or changes in the manufacturing or sales costs related to our products;
- the utilization of our instruments and the volume and mix of the sales of our consumables;
- the length of time of the sales cycle for purchases of our products and technologies, including our G4 Integrated Solution and our planned PX Integrated Solution;
- 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 or budget cycles;
- the timing of when we recognize any revenue;
- future accounting pronouncements or changes in our accounting policies;
- the outcome of any future governmental investigations involving us, our industry or both;
- higher than anticipated service, replacement and warranty costs;
- the impact of the COVID-19 pandemic on the economy, our business and operations, investment in life sciences and research industries, and resources and operations of our customers, suppliers and distributors;
- general industry, economic and market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors; and
- the other factors described in this “Risk Factors” section.

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 the expectations of industry or financial analysts or investors for any period. If we are unable to commercialize products or generate 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 common stock to decline.

***We expect to continue to incur substantial operating expenses in the future, which will negatively impact our ability to achieve or maintain profitability.***

We have experienced net losses and negative cash flows from operations since our formation in 2016. As of September 30, 2021, we had an accumulated deficit of \$132.1 million. Over the next several years, we expect to continue to incur significant expenses as we continue our research and development activities, finalize the development of our integrated solutions, continue to build our sales

and marketing organization and increase our manufacturing and commercialization capabilities. These efforts may prove to be more costly, or take longer, than we currently anticipate. In addition, as a public company, we will incur significant legal, accounting, administrative, insurance and other expenses that we did not incur as a private company. We have not generated any product revenue, and we may never generate revenue sufficient to offset our expenses, or at all. If our revenue does not eventually grow to a level that exceeds our expenses, we will not be able to achieve or maintain profitability. Additionally, we may encounter unexpected development delays, unforeseen expenses, operating delays, declines in revenue or other unknown factors that may result in losses in future periods. If we are unable to achieve and maintain sustained profitability, our business, results of operations, financial condition and prospects will be materially harmed.

***The COVID-19 pandemic and efforts to reduce its spread have adversely impacted and may materially and adversely impact our business and operations.***

The COVID-19 pandemic has spread worldwide, has caused many governments to implement measures to slow the spread of the outbreak through quarantines, travel restrictions, heightened border scrutiny and other measures. In addition, in response to the COVID-19 pandemic, many state, local and foreign governments have put in place quarantines, executive orders, shelter-in-place orders and similar government orders and restrictions in order to control the spread of the disease. Such orders or restrictions, and the perception that such orders or restrictions could continue or, after being lifted, be reinstated for a period of time, have resulted in business closures, work stoppages, slowdowns and delays, work-from-home policies, travel restrictions and cancellation of events, among other effects that have impacted our business, personnel, personnel at third-party manufacturing facilities and the availability or cost of materials, which would disrupt or delay our receipt of instruments, components and supplies from the third parties we rely on to produce our products.

For instance, there were previously standing “stay-at-home” orders in California, and specifically in San Diego County, where our headquarters is located. We have continued to operate within the rules applicable to our business; however, an extended implementation of these governmental mandates or reinstatement of additional more stringer mandates could further impact our ability to operate effectively and conduct ongoing research and development or other activities. Additionally, we have experienced longer lead times from our suppliers of components used in our product development and manufacturing operations, including due to supply chain challenges currently being experienced generally in the economy. Pandemic precautions and preventative measures may also impact our commercialization plans due to restrictions on our customers’ ability to access laboratories, causing delays in the delivery and installation of our products, training such customers on our products and their ability to conduct research. The ongoing build-out of our new headquarters and manufacturing facilities may also be delayed by COVID-19 related restrictions. The COVID-19 pandemic has also had an adverse effect on our ability to attract, recruit, interview and hire at the pace we would typically expect to support our rapidly expanding operations. To the extent that any governmental authority imposes additional regulatory requirements or changes existing laws, regulations and policies that apply to our business and operations, such as additional workplace safety measures, our product development plans may be delayed, and we may incur further costs in bringing our business and operations into compliance with new laws, regulations and policies.

In the near term, we expect that a substantial amount of our revenue will be derived from sales of our G4 Integrated Solution to academic and research institutions. Our ability to drive the adoption of our products will depend on our ability to visit customer sites to install and train customers on our G4 Integrated Solution, and the ability of our customers to access laboratories and conduct research in light of the COVID-19 pandemic. Additionally, the research and development budgets of these customers, the ability of such customers to receive funding for research, and the ability of such customers to receive instrument installations and visitors to their facilities and to travel to our facilities, other laboratories and industry events, will become increasingly important to the adoption of our G4 Integrated Solution. All of these activities are impacted by the COVID-19 pandemic in multiple ways, such as:

- reductions in capacity or shutdowns of laboratories and other institutions as well as other impacts stemming from the COVID-19 pandemic, such as reduced or delayed spending on instruments or consumables as a result of such delays and shutdowns;
- re-allocation of resources by potential customers toward COVID-19 research, testing or treatment;
- delays in obtaining supplies and materials used to produce our products;
- 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 and changes that have the effect of increasing the length of the funding process.

The ultimate impact of the COVID-19 pandemic 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 we rely on, and could worsen over time. The extent to which the COVID-19 pandemic impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including new information that may emerge concerning the severity of COVID-19 and

the actions to contain COVID-19 or treat its impact, among others. While we do not yet know the full extent of the potential future impacts on our business, any of these occurrences could significantly harm our business, results of operations and financial condition.

Further, the COVID-19 pandemic has resulted in, and may continue to result in, 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 our products and technologies and our ability to raise additional capital when needed on favorable terms, if at all. A weak or declining economy 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 business, results of operations, financial condition or our ability to raise capital.

### **Risks Related to the Development and Commercialization of Our Products**

***We have not commercially launched any products, and our efforts to finalize the development and commercially launch our G4 Integrated Solution or our planned PX Integrated Solution may not be successful.***

We have not commercially launched any product. With respect to our G4 Integrated Solution, we have completed our beta pilot program, are underway with our early access program, and anticipate a commercial launch of the G4 Integrated Solution and its first associated products by the end of 2021 with intentions for units to ship in the first half of 2022. With respect to our planned PX Integrated Solution, we are currently in an advanced prototype development stage for the initial products and expect to begin an early access program in 2022 and full commercial launch in 2023. Our product development and commercial launch plans may not progress as planned or may not be successful due to:

- potential delays in finalizing development and internal validation of our products, including the failure to meet targeted performance metrics;
- our inability to commercialize our G4 Integrated Solution and/or planned PX Integrated Solution without first being required to change the specifications, design and performance of such products, including the associated reagents and consumables;
- our inability to establish the capabilities and value proposition of our G4 Integrated Solution or our planned PX Integrated Solution with KOLs and early adopters in a timely fashion, including through information included in scientific publications and presentations;
- our inability to establish broad scientific acceptance of our G4 Integrated Solution or planned PX Integrated Solution;
- potential litigation brought by our competitors against our products, technology or intellectual property;
- the continued effect and lasting impact of the COVID-19 pandemic;
- our inability to overcome the long-term relationships, including exclusive agreements, that our competitors have established with our target customers;
- actions taken by our competitors, including new product introductions and the ability to offer significant discounts and to bundle products and services to our target customers;
- our customers' willingness and ability to adopt new products and workflows, including in light of commercial pressures applied by our competitors and pre-existing long-term contracts with our competitors;
- our ability to demonstrate that our G4 Integrated Solution and our planned PX Integrated Solution provide meaningful advantages over competing products and technologies;
- the prices we charge for our G4 Integrated Solution and planned PX Integrated Solution and other products and technologies;
- our ability to develop new products and workflows and solutions for customers, and the impact of our investments in product innovation and commercial growth;
- our ability to provide service and maintain the products we have sold; and
- changing industry or market conditions, customer expectations or requirements;
- delays in building out our sales, customer support and marketing organization as needed for our commercial launch plan;

- delays in ramping up manufacturing, including obtaining required materials and components from third-party suppliers, to meet expected or actual demand for our products.

We cannot assure you that we will be successful in addressing each of the risks and uncertainties that might affect the development and market acceptance of any products we commercialize, particularly our G4 Integrated Solution. For example, we cannot guarantee that we will finalize the development of our G4 Integrated Solution on a timely basis, meet our targeted performance metrics for the G4 Integrated Solution or that customer experiences or reviews of our G4 Integrated Solution from our early access program will be favorable. The customers in the program may not use our G4 Integrated Solution as we intend or interpret results incorrectly, or may experience breakdowns, manufacturing defects, errors or bugs common with beta and early access product introductions, which could negatively impact their perception of our G4 Integrated Solution regardless of its actual capabilities. Initial negative perception of our G4 Integrated Solution by customers in our early access program could irreparably damage our reputation and ability to later successfully commercialize our G4 Integrated Solution or our planned PX Integrated Solution or future systems or products. In addition, as we begin to commercialize our G4 Integrated Solution 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, required manufacturing improvements and quality assurance will be successfully implemented or that appropriate personnel will be available. To the extent any of our commercial launch plans and related activities are delayed, unsuccessful or more expensive than we currently anticipate, our financial results will be adversely impacted and we may never generate sufficient revenue to achieve and maintain profitability.

***If we are unable to establish sales and marketing capabilities, we may not be successful in commercializing our G4 Integrated Solution or our planned PX Integrated Solution.***

We have no experience commercializing our products, and our ability to achieve profitability depends on being able to successfully commercialize our G4 Integrated Solution and our planned PX Integrated Solution. Although members of our management team have considerable industry experience, we are in the process of expanding our sales, marketing, distribution and customer service and support capabilities with the appropriate technical expertise prior to the broad commercial launch of our first product, the G4 Integrated Solution. To perform sales, marketing, distribution, and customer service and support successfully, we will face a number of risks, including:

- our ability to attract, train, retain and manage the sales, marketing and customer service and support force necessary to commercialize and gain market acceptance for our products and train and support our customers in the use of our systems;
- our ability to develop marketing materials;
- our ability to adopt successful marketing and pricing strategies;
- 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 may seek to enlist one or more third parties to assist with sales, distribution and customer service and support globally or in certain regions of the world. There is no guarantee, if we do seek to enter into such arrangements, that we will be successful in attracting desirable sales and distribution partners or that we will be able to enter into such arrangements on favorable terms. If our sales and marketing efforts, or those of any third-party sales and distribution partners, are not successful, our G4 Integrated Solution or our planned PX Integrated Solution, may not gain market acceptance, which could materially impact our business and results of operations.

***Our Sequencing Engine and Integrated Solutions could fail to achieve key performance metrics we are targeting and our prospects could be harmed.***

We believe our Sequencing Engine can impart commercially marketable capabilities to our products, including high accuracy, speed, flexibility and scale. To successfully commercialize our Integrated Solutions, we are targeting certain performance metrics, including cycle times for each base, accuracy for base reads, quality scores and the number of independent flow cells that can run concurrently. While we have preliminarily achieved certain of our targeted metrics for our G4 Integrated Solution in early testing, we have not yet achieved certain targeted metrics and, as a result, we will need to continue our product development efforts and enhance the performance of our G4 Integrated Solution prior to our planned commercial launch. If our Sequencing Engine or Integrated Solutions are unable to meet and to consistently achieve these key performance metrics, including once commercially deployed, or, if the data supporting our preliminary achievement of certain key performance metrics are incorrect or not viewed favorably by KOLs or potential customers, demand for our G4 Integrated Solution and planned PX Integrated Solution may not develop as anticipated, which could adversely affect our revenue and our results of operations.

***If we fail to finalize the development of our G4 Integrated Solution and complete the development of our PX Integrated Solution, our revenue and our prospects could be harmed.***

Our G4 Integrated Solution has completed the beta pilot program of our commercialization plan. While we believe the development of our G4 Integrated Solution is nearly final, our collaborators in our beta pilot or early access programs may request certain design or other modifications that could cause us to modify or attempt to further improve our G4 Integrated Solution, which could delay or prevent its commercial launch. Further, we are working to develop and enhance the performance of our G4 Integrated Solution to meet targeted performance metrics that we believe are necessary to support its broad commercial adoption. Any delay or failure by us to successfully develop, release, enhance, commercialize and support our G4 Integrated Solution will have a substantial adverse effect on our business and results of operations.

Our planned PX Integrated Solution is in the development phase, and is subject to all the risks and uncertainties associated with product development of highly complex and novel life sciences instruments. We have not met a number of technical and performance metrics that we believe will be necessary to achieve prior to commercialization. If we do not achieve the required technical specifications and performance metrics for our planned PX Integrated Solution or if development work is not performed according to our planned schedule, then we may not be successful in finalizing our planned PX Integrated Solution and its commercial launch may be adversely affected, delayed or not occur at all. Additionally, our planned PX Integrated Solution could be subject to redesign or further improvements, and result in delays in finalizing development and commencing commercialization, after feedback from beta collaborators and KOLs. Any delay or failure by us to successfully develop, release, commercialize and maintain our PX Integrated Solution will have a substantial adverse effect on our business and results of operations.

***If we fail to continue to improve our planned products or, introduce compelling new products, product enhancements or product configurations, our revenue and our prospects could be harmed.***

Even if we are able to commercially launch our G4 Integrated Solution, and successfully develop and commercialize our planned PX Integrated Solution, our ability to attract new customers and increase revenue from existing customers will depend in large part on our ability to continue to enhance and improve our products and to introduce compelling new products and product capabilities. The success of any enhancements to our G4 Integrated Solution or our planned PX Integrated Solution, or the introduction of any new products and product capabilities depends on several factors, including timely completion and delivery of such enhancements and products, competitive pricing, adequate quality testing, integration with existing products and technologies, appropriately timed and staged introduction, overall market acceptance and our ability to properly service and maintain these products. Any new products or enhancements 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 increase our revenue and improve our operating results. Further, if we are unable to successfully develop any new products, enhance the capabilities of our existing products to meet evolving customer requirements and demands, compete with alternative products and technologies, or otherwise gain and maintain market acceptance, our business, results of operations and financial condition could be harmed.

***The sizes of the markets for our products and technologies may be smaller or grow slower than we estimate, and new markets may not develop as quickly as we expect, or at all, limiting our ability to successfully sell our products.***

The market for NGS, single-cell, spatial and proteomics products and technologies is evolving, making it difficult to predict with any accuracy the market opportunity for our current and future products and technologies. Our estimates of the total addressable market for our current and future products and technologies are based on a number of internal and third-party estimates and assumptions. In particular, while we believe that our target markets may be underserved by existing genomics products and technologies and that our target customers will recognize the value proposition offered by our products, we cannot be certain that our target customers will recognize enough value from our products to purchase our products in place of, or in addition to, tools and technologies they already use. Further, we cannot be certain that our target customers will view our products as competitive alternatives to existing tools and technologies in our target markets, especially given that our competitors have long relationships, including exclusive arrangements, with our target customers and may be able to offer significant discounts and/or bundle products or offerings to our target customers.

While we believe our assumptions and the data underlying our estimates of the total annual addressable market for our products and technologies 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 annual total addressable market for our products and technologies may be incorrect. Further, the future growth of the market for our current and future products depends on many factors beyond our control, and 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 expect to commercialize our G4 Integrated Solution and our planned PX Integrated Solution outside of the United States, which could expose us to business, regulatory, 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 (“EU”) 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 require 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 established by the office of Foreign Asset Control;
- export requirements and import or trade restrictions;
- laws and business practices favoring local companies;
- foreign currency exchange, longer payment cycles and difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;
- changes in social, economic, and political conditions or in laws, regulations and policies governing foreign trade, manufacturing, research and development, and investment 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.

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.

### **Risks Related to Our Financial Position and Need for Additional Capital**

***We may require substantial additional funding, which may not be available to us on acceptable terms, or at all, and, if not available, may require us to delay, scale back, or cease our product development or commercialization activities.***

Based on our current plans, we believe that our current cash and cash equivalents, short-term investments and anticipated cash flow from operations, if any, will be sufficient to (i) meet our anticipated cash requirements for at least 12 months from the date of this report and, (ii) with the additional funds from the net proceeds of our IPO, to finalize the development and to commence commercializing our G4 Integrated Solution and to complete the development of our planned PX Integrated Solution. If our available cash resources and anticipated cash flows from operations, if any, are insufficient to satisfy our liquidity requirements, we may be required to raise significant additional capital to support our continued operations and the implementation of our business plans. Our future funding requirements will depend on many factors, including but not limited to:

- our rate of progress in finalizing development, launching, commercializing and scaling the manufacturing of our G4 Integrated Solution;
- the costs of the sales and marketing activities associated with establishing adoption of our G4 Integrated Solution;
- the effect of competing technological and market developments, including our requirement to provide discounts for G4 Integrated Solution in light of competitive pressures;
- litigation expenses we incur to defend against claims that we infringe the intellectual property of others or judgments we must pay to satisfy such claims;
- our rate of progress in developing, launching and commercializing our planned PX Integrated Solution, and any new products or product enhancements we elect to pursue;
- our ability to control our manufacturing and operating costs;
- our ability to satisfy our outstanding debt obligations; and
- the costs of responding to the other risks and uncertainties described in this report.

We will also be required to raise additional capital in the future to expand our business and operations, to pursue strategic investments, or for other reasons, including but not limited to:

- increasing our sales and marketing and other commercialization efforts to drive market adoption of our G4 Integrated Solution;
- commercializing our planned PX Integrated Solution;
- scaling up our manufacturing and customer support capabilities;
- funding development and marketing efforts of our other future products and product enhancements;

- 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.

We may seek required funding through issuances of equity or convertible debt securities, entering into additional loan facilities or drawing down additional funds under our 2021 SVB Loan. Each of the various ways we could raise additional capital carry potential risks. If we raise funds by issuing equity securities, dilution to our stockholders would result. If we raise funds by issuing additional debt securities, those debt securities would have rights, preferences and privileges senior to those of holders of our common stock. Our 2021 SVB Loan restricts our ability to pursue certain transactions that we may believe to be in our best interest, including incurring additional indebtedness without the prior written consent of the lender under the 2021 SVB Loan. 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.

***Our results of operations could be materially harmed if we are unable to accurately forecast customer demand for our G4 Integrated Solution, our planned PX Integrated Solution, if and once developed and commercialized, and any other future products and product enhancements we elect to pursue.***

To ensure adequate inventory supply of our G4 Integrated Solution, including our G4 Instrument and the associated consumables, we must forecast our inventory needs and appropriately scale-up our manufacturing operations and personnel to build a sufficient supply of our G4 Integrated Solution prior to commercial launch. We must also place orders with our third-party suppliers based on such forecasts. Our ability to accurately forecast demand for our G4 Integrated Solution could be negatively affected by many factors, including delays in finishing the development of our G4 Integrated Solution, the results of our beta pilot program and early access program, our ability to timely scale our manufacturing operations and capabilities, the success of our sales and marketing activities and customer acceptance of our G4 Integrated Solution as well as adverse impacts as a result of COVID-19. These same risks and uncertainties will also apply to our planned PX Integrated Solution and any other future products and product enhancements we elect to pursue.

Inventory levels in excess of customer demand may result in inventory write-downs or write-offs, which would cause our gross margin to be adversely affected and could impair the strength of our brand. Similarly, a portion of our inventory could become obsolete or expire, which could have a material and adverse effect on our earnings and cash flows due to the resulting costs associated with inventory impairment charges and costs required to replace obsolete inventory. Any of these occurrences could negatively impact our financial performance.

Conversely, if we underestimate customer demand for our G4 Integrated Solution, our planned PX Integrated Solution or any other future products and product enhancements we elect to pursue, we may not be able to deliver sufficient products to meet our customer requirements, which could result in damage to our reputation and customer relationships. In addition, if we experience a significant increase in demand, we may not be able to increase our manufacturing capacity on a timely basis. Further, we may not be able to obtain the components for our products when required on terms that are acceptable to us, or at all, which could have an adverse effect on our ability to meet customer demand and harm our business and results of operations.

***Our existing indebtedness may limit our flexibility in financing and operating our business and adversely affect our business, financial condition and results of operations.***

As of September 30, 2021, there was \$10.5 million of principal owed under our 2021 SVB Loan. In addition to this outstanding amount, we may borrow substantial funds in the future to provide a portion of the capital needed in our business and may secure the repayment of such borrowings by placing additional liens or other encumbrances on our assets. Our 2021 SVB Loan contains customary conditions to borrowing, events of default and affirmative and negative covenants, including covenants that restrict our ability (and the ability of certain of our subsidiaries) to incur additional indebtedness, grant liens, make certain fundamental changes and asset sales, pay dividends or make other distributions to holders of our stock, make investments or engage in transactions with our affiliates. Such restrictions could limit our ability to take certain actions could reduce our flexibility to run and manage our business which could have an adverse effect on our results of operations. The obligations under the 2021 SVB Loan are also secured by liens on substantially all of our assets, excluding our intellectual property on which there is a negative pledge, subject to customary exceptions. If we were unable to repay amounts due under the 2021 SVB Loan, Silicon Valley Bank could proceed against such assets. Any declaration by Silicon Valley Bank of an event of default could significantly harm our business and prospects and could cause the price of our common shares to decline.

***Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.***

We have incurred substantial losses during our history, which we expect to continue for the foreseeable future, and we may never achieve profitability. As of December 31, 2020, we had federal and California tax loss carryforwards of approximately \$48.7 million and \$47.1 million, respectively. As of December 31, 2020, we had federal and state tax credit carry forwards of approximately \$1.6 million and \$2.2 million, respectively. Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, (the “Code”), if a corporation undergoes an “ownership change,” generally defined as a greater than 50 percentage point change (by value) in its equity ownership by certain stockholders over a three-year period, the corporation’s ability to use its pre-change net operating loss carryforwards (“NOLs”), and other pre-change tax attributes (such as research tax credits) to offset its post-change income or taxes may be limited. We have not yet completed an ownership change analysis. If a requisite ownership change occurs, the amount of remaining tax attribute carryforwards available to offset taxable income and reduce income tax expense in future years may be restricted or eliminated. Similar provisions of state tax law may also apply to limit our use of accumulated state tax attributes. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. As a result, even if we attain profitability, we may be unable to use a material portion of our NOLs and other tax attributes based on restrictions in the Code, which could adversely affect our future cash flows and results of operations.

***U.S. federal income tax reform and the implementation of such reforms could adversely affect us.***

On December 22, 2017, the United States enacted the Tax Cuts and Jobs Act (the “TCJA”) that significantly reformed the Code. The TCJA, among other things, contained significant changes to corporate taxation, including a reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, the limitation of the tax deduction for net interest expense to 30% of adjusted earnings (except for certain small businesses), the limitation of the deduction for NOLs arising in taxable years beginning after December 31, 2017 to 80% of current year taxable income and elimination of NOL carrybacks for losses arising in taxable years ending after December 31, 2017 (though any such NOLs may be carried forward indefinitely), the imposition of a one-time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, the elimination of U.S. tax on foreign earnings (subject to certain important exceptions), the allowance of immediate deductions for certain new investments instead of deductions for depreciation expense over time, and the modification or repeal of many business deductions and credits. The financial statements contained herein reflect the effects of the TCJA based on current guidance. However, there remain uncertainties and ambiguities in the application of certain provisions of the TCJA, and, as a result, we made certain judgments and assumptions in the interpretation thereof.

As part of Congress’s response to the COVID-19 pandemic, the Families First Coronavirus Response Act (the “FFCR Act”), was enacted on March 18, 2020, and the Coronavirus Aid, Relief, and Economic Security Act, (the “CARES Act”), was enacted on March 27, 2020. Both contain numerous tax provisions. In particular, the CARES Act retroactively and temporarily (for taxable years beginning before January 1, 2021) suspends application of the 80%-of-income limitation on the use of NOLs, which was enacted as part of the TCJA. It also provides that NOLs arising in any taxable year beginning after December 31, 2017 and before January 1, 2021 are generally eligible to be carried back up to five years. The CARES Act also temporarily (for taxable years beginning in 2019 or 2020) relaxes the limitation of the tax deductibility for net interest expense by increasing the limitation from 30% to 50% of adjusted taxable income.

**Risks Related to Manufacturing Our Products**

***We may be unable to manufacture our G4 Integrated Solution to meet our commercialization plans on a timely or cost effective basis.***

We must successfully increase our manufacturing output to meet our commercialization plans and to support our planned commercial launch of our G4 Integrated Solution by the end of 2021, with units planned to be shipped during the first half of 2022. We currently manufacture our G4 Instrument in our facilities in La Jolla, California. We have leased and are currently building out a new manufacturing facility at a new location in La Jolla, California to support our growth and commercialization plans. In order to manufacture sufficient G4 Instruments, and the associated consumables, to meet our commercialization plans, we will need to hire and train a sufficient number of manufacturing, engineering and quality personnel. Manufacturing our G4 Instruments, and the associated consumables, requires complex processes, and depends on the skill and experience of our manufacturing personnel. The manufacturing process for our G4 Instrument, and the associated consumables, also includes sourcing components from various third-party suppliers and then assembling and testing the final product offerings. We must manufacture our G4 Integrated Solution in compliance with our demanding specifications and at an acceptable cost in order to achieve and maintain profitability. We have only a limited history of manufacturing and assembling our G4 Instrument and the associated consumables, and, as a result, we may have difficulty manufacturing and assembling sufficient quantities of such products in a timely and cost effective manner. To manage our manufacturing operations and the supply of components from our third-party suppliers, we will need to forecast anticipated demand to predict our inventory needs from six months to a year in advance and enter into purchase orders on the basis of these requirements.

Our limited manufacturing history may not provide us with enough data to allow us to accurately and effectively predict our manufacturing capacity requirements or our need for components from our third-party suppliers, including appropriately anticipating fluctuations in the availability and pricing of required components. We may experience delays in obtaining components required for our G4 Instrument or the associated consumables, including due to recent supply chain challenges being experienced in the economy generally, or not have sufficient manufacturing capabilities and personnel for such products, which could impede our ability to manufacture and assemble these products on our expected timeline. As a result of this or any other delays, we may encounter difficulties in production of our G4 Instrument and the associated consumables, including problems with quality control and assurance, component supply shortages or surpluses, increased costs, shortages of qualified personnel and difficulties associated with compliance with local, state, federal and foreign regulatory requirements.

***We are dependent on single source suppliers for some components to our consumables and the loss of any of these suppliers could harm our business.***

We do not have long-term contracts with third-party suppliers from whom we obtain some components to manufacture the consumables associated with our G4 Instrument. We are, therefore, subject to the risk that these third-party suppliers will not continue to provide us with components that meet our specifications, quality standards and delivery schedules. Factors that could impact our suppliers' willingness and ability to continue to provide us with the required components include disruption at or affecting our suppliers' facilities, such as work stoppages or natural disasters, demand for and availability of raw materials and subcomponents, adverse weather or other conditions that affect their supply, the financial condition of our suppliers and deterioration in our relationships with these suppliers. In addition, we cannot be sure that we will be able to obtain these components on satisfactory terms. Any increase in component costs could reduce any potential future sales and harm our gross margins.

While we have qualified second sources for several of our critical components, including flow cells, optics and oligonucleotides, we do not have qualified secondary sources for all components that we source through a single supplier and we cannot assure investors that the qualification of a secondary supplier will prevent future supply issues. Disruption in the supply of materials or components would impair our ability to sell our products and meet customer demand, and also could delay the launch of new products, any of which could harm our business and results of operations. If we were to have to change suppliers, the new supplier may not be able to provide us components in a timely manner and in adequate quantities that are consistent with our quality standards and on satisfactory pricing terms. In addition, alternative sources of supply may not be available for components for which there are a limited number of suppliers which could result in a requirement to redesign certain aspects of our products.

***We have limited experience manufacturing G4 Integrated Solution, and we may be unable to consistently manufacture or supply our G4 Integrated Solution to the necessary specifications or in quantities necessary to meet demand on a timely basis and at acceptable performance and cost levels.***

Our G4 Integrated Solution is a complex product with many different components that must work together to obtain the desired results. As such, a quality defect in a single component can compromise the performance of the entire product. In order to successfully generate revenue from our G4 Integrated Solution, 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. Given the complexity of our G4 Integrated Solution, individual G4 Instruments may occasionally require additional installation and service time prior to becoming available for customer use and we may be required to replace lots of reagents or consumables.

We intend to manufacture our G4 Integrated Solution at our existing facilities and our new headquarters located in La Jolla, California. We procure certain components of our G4 Instrument, and our associated consumables, from third-party suppliers, which include both commonly available raw materials and custom components. Many of these manufacturing processes are complex. As we move towards commercial scale manufacturing, if we are not able to repeatedly produce our G4 Integrated Solution at commercial scale and source required components from third-party suppliers, our business will be adversely impacted. In particular, we will need to obtain certain approvals and certifications to build our new facility that can be capable of manufacturing our integrated solutions. We do not have experience in constructing manufacturing facilities and if we are unable or delayed in obtaining required approvals and certifications our commercialization efforts could be adversely affected.

As we continue to scale commercially in anticipation of the launch of our G4 Integrated Solution and finalize the development of our planned PX Integrated Solution and any new products or product enhancements, 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. We have limited manufacturing experience and no experience manufacturing our products at commercial scale and there is no assurance that we will be able to manufacture our products so that they repeatedly provide accurate results consistent with product specifications. Further, our 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 our inventory levels and the availability and lead time for additional inventory, could lead to availability issues. As we develop additional products, we may need to bring new equipment on-line, implement new systems, technology, controls and procedures and hire personnel with different qualifications. Any future design

issues, unforeseen manufacturing problems, 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.

***Our G4 Integrated Solution could have defects or errors, which may give rise to claims against us, adversely affect market adoption and adversely affect our business, financial condition, and results of operations.***

Our G4 Integrated Solution utilizes novel and complex technologies and may develop or contain undetected defects or errors. We cannot assure you that material performance problems, defects, or errors will not arise, and as we commercialize our products, these risks may increase. We expect to provide warranties that our products will meet performance expectations and will be free from defects. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins.

In manufacturing our G4 Integrated Solution, we depend upon third parties for the supply of various components, many of which require a significant degree of technical expertise to produce. If our suppliers fail to produce our 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 our G4 Integrated Solution contains defects, we may experience:

- a failure to achieve market acceptance for our products or increased sales;
- loss of customer orders or delays 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 or gain market acceptance;
- diversion of resources from our manufacturing and research and development departments into our service department; and
- legal claims against us, including product liability claims, which could be costly and time consuming to defend and result in substantial damages.

In addition, we expect that our G4 Integrated Solution will be used with our potential customers' own lab equipment and third-party products, and the performance of this equipment and products is outside of our control. If our customers' equipment or the third-party products they utilize are not produced to specification, are produced in accordance with modified specifications, or are defective, they may not be compatible with or perform as intended with our G4 Integrated Solution. In such case, the reliability, results and performance of our G4 Integrated Solution may be compromised. The occurrence of any one or more of the foregoing could negatively affect our business, financial condition, and results of operations. Additionally, we expect that we will need to train our customers on properly using our G4 Integrated Solution. If we are unable to adequately train our customers to use our G4 Integrated Solution or they fail to follow our training and protocols we have established, the performance of our G4 Integrated Solution may be compromised.

***Our ability to achieve profitability will depend, in part, on our ability to reduce the per unit manufacturing costs of our G4 Integrated Solution.***

To achieve our operating and strategic goals, we will need to, among other things, reduce the per unit manufacturing cost of our G4 Instrument and the associated consumables. Manufacturing our G4 Instrument and our associated consumables involve complex processes, and depend on the skills and experience of our manufacturing personnel. We may experience low manufacturing yields for our G4 Instrument and our consumables. In addition, we will need to continually focus on reducing the per unit manufacturing cost of our G4 Instrument and associated consumables, which cannot be achieved without increasing the volume of components that we purchase in order to take advantage of volume-based pricing discounts, improving our manufacturing efficiency or increasing our volumes to leverage manufacturing overhead costs. If we are unable to improve our manufacturing efficiency and reduce our manufacturing overhead costs per unit, our ability to achieve profitability will be severely constrained. Any increase in manufacturing volumes is dependent upon a corresponding increase in sales. The occurrence of one or more factors that negatively impact the manufacturing or sales of our G4 Integrated Solution or reduce our manufacturing efficiency may prevent us from achieving our desired reduction in manufacturing costs, which would negatively affect our operating results and may prevent us from attaining profitability.

***If our facilities or our third-party suppliers' facilities become unavailable or inoperable, our research and development program and commercialization launch plan could be adversely impacted and manufacturing of our G4 Integrated Solution could be interrupted.***

Our existing and planned facilities in La Jolla, California house our corporate, research and development, manufacturing, sales and marketing, customer support and quality assurance teams. Our facilities and those of our third-party suppliers are vulnerable to natural disasters, public health crises, including the impact of the COVID-19 pandemic, and catastrophic events. For example, our La Jolla facilities are located near earthquake fault zones and are vulnerable to damage from earthquakes as well as other types of disasters, including fires, floods, power loss, communications failures and similar events. If any disaster, any new or continuing 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 suppliers' facilities become unavailable for any reason, we cannot provide assurances that we will be able to secure alternative facilities with the necessary capabilities and equipment or alternative suppliers on acceptable terms, if at all. We may encounter particular difficulties in replacing our La Jolla facilities given the specialized equipment housed within it. The inability to manufacture our G4 Instrument and associated consumables, combined with our limited inventory of such manufactured products, 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 our consumables 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 products, and we may not be able to replace them without disruption to our customers or at all.

If our business operations are disrupted by a disaster or catastrophe, the launch of our G4 Integrated Solution and our planned PX Integrated Solution, and the timing of improvements to such 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 suppliers' 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, 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.

***The costs to maintain and provide customer support for our G4 Integrated Solution, and any future products or product enhancements that we commercialize, may exceed our expectations.***

We have not begun to commercialize our G4 Integrated Solution or to manufacture our G4 Integrated Solution in commercial quantities. As we start to commercialize our G4 Integrated Solution, we will need to build a commercial organization and infrastructure to support the following activities:

- installing our G4 Integrated Solution in customer locations;
- training customers on the use of our G4 Integrated Solution;
- providing customer support services; and
- providing maintenance, repair and warranty services.

We may not be successful in developing the organization or commercial infrastructure necessary to provide these customer support activities in a timely manner, and on a cost effective basis. Any failure to provide our customers with a superior customer experience, to timely respond to their requests and questions and to provide maintenance and warranty services, may adversely affect our brand and our results of operations.

## **Risks Related to Our Planned Growth**

***If we do not successfully manage our current and anticipated growth, our business and prospects will be harmed.***

From December 31, 2020 to September 30, 2021, the number of our full-time employees increased from 121 to 200. Since that time, we have continued to increase our employee headcount and expand our operations and expect to continue to do so as we approach commercialization. Our recent growth has placed significant strains on our management, financial systems and internal controls. We expect that the anticipated growth associated with the commercial launch of our G4 Integrated Solution and the development and commercial launch of our planned PX Integrated Solution, will also strain our operational and manufacturing systems and processes, sales and marketing team, financial systems and internal controls and other aspects of our business. Developing and commercializing our G4 Integrated Solution, and continuing to develop our planned PX Integrated Solution, will require us to hire and retain scientific, sales and marketing, software, manufacturing, customer service, and quality assurance personnel. In addition, we expect that we will need to hire additional accounting, finance and other personnel in connection with our becoming, and 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 growth activities. We have faced challenges integrating, developing and motivating our rapidly growing employee base, especially during the COVID-19 pandemic, and may continue to face related challenges as we continue to grow. 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 in a virtual environment during the COVID-19 pandemic and related governmental work from home mandates. Our ability to successfully

manage our expected growth is uncertain given the fact that we have been in operation only since 2016. 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 and technologies. If we do not successfully manage our anticipated growth, our business, results of operations, financial condition and prospects will be harmed.

***We depend on our senior management team and the loss of one or more key employees or an inability to attract and retain highly skilled employees will negatively affect our business, financial condition and results of operations.***

Our future success depends upon our ability to recruit, train, retain and motivate our senior management team and our other highly qualified personnel. Our senior management team, including Andrew Spaventa, our founder, Chief Executive Officer and Chairperson of the Board, Eli Glezer, our founder and Chief Scientific Officer, and David Daly, our President and Chief Operating Officer, is critical to our vision, strategic direction, product development and commercialization efforts. The departure of one or more of these individuals or any of our other 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 have long-term employment contracts or maintain “key man” life insurance on our senior management team.

Our continued growth and ability to successfully transition from a company primarily focused on research and development to commercialization depends, in part, on attracting, retaining and motivating qualified personnel, including highly-trained sales and marketing personnel with the necessary scientific background and ability to understand our products at a technical level to effectively identify, market and sell to potential new customers. New hires will 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 in the life sciences space is intense, particularly in the San Diego metropolitan area. 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 Diego metropolitan area, 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.

We do not maintain fixed term employment contracts with any of our employees, including the members of our senior management team. As a result, our executives and other key employees could leave our company with little or no prior notice and would 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 may acquire or invest in other companies or technologies, 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 our G4 Integrated Solution, our planned PX Integrated Solution or any other future products and product enhancements we elect to pursue. We may also pursue acquisitions or investments to expand our technical capabilities or otherwise offer growth opportunities. The pursuit of potential acquisitions or investments may divert the attention of management and cause us to incur various costs and expenses in identifying, investigating and pursuing suitable acquisitions or investments, 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. Also, our 2021 SVB Loan may restrict our ability to pursue certain mergers, acquisitions, amalgamations or consolidations without obtaining the prior consent of Silicon Valley Bank or repaying our outstanding loan amounts. Additionally, future acquisitions or investments could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses or write-offs of goodwill, any of which could harm our financial condition.

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

We 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 and partners 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 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, stolen or fraudulently obtained log-in credentials, employee errors, actions, inaction, theft, or misuse, and denial-of-service attacks, there are sophisticated nation-state and nation-state supported actors that now engage in attacks, including advanced persistent threat intrusions. Our information technology and data security procedures continue to evolve and therefore, our information technology systems may be more susceptible to cybersecurity attacks. 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.

If our security measures, or those of our vendors and partners, are compromised due to any cybersecurity attacks or data security breaches, our business and reputation may be harmed, we could become subject to litigation and we could incur significant liability. If we were to 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 in an acceptable timeframe. In addition, our information technology systems, and those of our vendors and partners, are potentially vulnerable to data security breaches and supply chain attacks, 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 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, or could lead to the exposure of personal information, including sensitive personal information, of our employees, customers and others, any of which could have a material adverse effect on our business, reputation, financial condition and results of operations.

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. 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 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.

***The implementation of a new enterprise resource planning system could cause disruption to our business and operations.***

We are in the process of implementing a new enterprise resource planning system (“ERP system”). This system will integrate our operations, including supply-chain, order entry, manufacturing, inventory and financial reporting, among others. ERP system implementations are complex projects that require significant investment of capital and human resources, the reengineering of many business processes and the attention of many employees who would otherwise be focused on other aspects of our business. Any disruptions, delays or deficiencies in the design and implementation of the improvements to our ERP system may result in potentially much higher costs than anticipated and may adversely affect our ability to develop and manufacture our products, commercialize our products, fulfill contractual obligations, file reports with the Securities and Exchange Commission, or the SEC, in a timely manner or otherwise operate our business and our controls environment. Moreover, despite our security measures, our information technology systems, including the ERP system, are vulnerable to damage or interruption from fires, floods and other natural disasters, terrorist

attacks, computer viruses or hackers, power losses and computer system or data network failures, which could result in significant data losses or theft of sensitive or proprietary information. Any of these consequences may harm our business.

## **Risks Related to our Intellectual Property**

***If we are sued for infringing, misappropriating or otherwise violating intellectual property rights of third parties, such litigation could be costly and time consuming and could prevent or delay us from developing or commercializing our product candidates.***

Our commercial success depends on our ability to develop, manufacture, market and sell our products and use our products and technologies without infringing, misappropriating or otherwise violating the intellectual property rights of third parties. We operate in a crowded technology area in which there are numerous issued patents and patent applications and in which there has been substantial litigation regarding patent and other intellectual property rights. There also is a substantial number of administrative proceedings for challenging patents, including interference, derivation, *inter partes* review (“IPR”), post grant review, and reexamination proceedings before the United States Patent and Trademark Office (“USPTO”), or oppositions and other comparable proceedings in foreign jurisdictions. We expect to be exposed to, or threatened with, future litigation by third parties, including our primary competitors, who have patent and other intellectual property rights and may allege that our research and development activities, products, manufacturing methods, software and/or technologies infringe, misappropriate or otherwise violate their intellectual property rights. Our competitors have numerous issued patents and pending patent applications in the fields covered by our products and 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. In addition, many patent applications are unpublished for up to 18 months from their first filing date and are not accessible to us. We expect that our competitors will, in connection with our launch of our G4 Integrated Solution and our planned PX Integrated Solution and later stage product offerings, assert that we are infringing, or have in the past infringed as part of our research and development activities, their patent and other intellectual property rights 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, against us by filing an intellectual property-related lawsuit, including a patent infringement lawsuit, against us. There is no assurance that a court would find in our favor on questions of infringement, validity, enforceability, or priority. If any of our competitors, or any other third parties, were to assert their 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 technology and we may be required to redesign such products and 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, which may not be on commercially reasonable terms or may not be obtainable at all. 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 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, or other foreign patent offices review the patent claims. However, there can be no assurance that any such challenge will be successful and if not successful, we may be estopped from asserting in a district court any grounds already raised or that could have been raised in certain proceedings, such as IPR at the USPTO. Even if such proceedings are successful, these proceedings are expensive and may consume our time or other resources, distract our management and technical personnel.

Third parties, including our existing and future competitors, may be infringing, misappropriating or otherwise violating our owned and in-licensed intellectual property rights. Monitoring unauthorized use of our intellectual property will be 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. 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. We may not be successful in such proceedings. 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. The outcome in any such

proceedings are unpredictable. Third parties may also bring challenges to our patents in the USPTO or foreign patent offices seeking to invalidate them.

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 such ongoing litigation, and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our 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, continuation and results 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 adverse effect on our business, financial condition, results of operations and prospects.

***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.***

We rely on patent, trademark, copyright, trade secret and other intellectual property rights 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. We currently have three issued patents covering our proprietary next-generation sequencing technology. If we fail to obtain additional patent protection for our products and technology and maintain and protect our intellectual property rights, 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. Further, 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 ability to successfully commercialize our products may be impaired.

We have and intend to continue to 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 such as ours is generally highly uncertain, involves complex legal and factual questions, and our industry has been to widespread and intense 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 technologies, 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.

***We cannot ensure that patent rights relating to inventions described and claimed in our pending patent applications will issue and will provide sufficient protection for our products and technologies. We also cannot ensure that our patents or patents based on our patent applications will not be challenged and rendered invalid and/or unenforceable.***

Our success depends in large part on our ability to obtain and maintain intellectual property protection, particularly patents, for our products and technologies in the both the United States and other foreign countries. Patents are of national or regional effect, and filing, prosecuting and defending patents on all of our products and technologies throughout the world would be prohibitively expensive, and the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. As such, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Further, the legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property protection, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. As such, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Furthermore, certain foreign and developing countries, including China and India, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to a third-party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. 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. We have pending U.S. and foreign patent applications in our portfolio, however, we cannot predict:

- if and when patents may issue based on our patent applications;
- the scope of protection of any patent issuing based on our patent applications;
- whether the claims of any patent issuing based on our patent applications will provide protection against competitors;
- whether or not third parties will find ways to invalidate or circumvent our patent rights;
- whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications;
- whether we will need to initiate litigation or administrative proceedings to enforce and/or defend our patent rights which will be costly whether we win or lose; and/or
- whether the patent applications that we own or in-license will result in issued patents with claims that cover our product candidates or uses thereof in the United States or in other foreign countries.

We cannot be certain that the claims in our pending patent applications directed to our product candidates and/or technologies will be considered patentable by the USPTO or by patent offices in foreign countries. One aspect of the determination of patentability of our inventions depends on the scope and content of the “prior art,” information that was or is deemed available to a person of skill in the relevant art prior to the priority date of the claimed invention. There may be prior art of which we are not aware that may affect the patentability of our patent claims or, if issued, affect the validity or enforceability of a patent claim. Even if the patents do issue based on our patent applications, third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. Furthermore, even if they are unchallenged, patents in our portfolio may not adequately exclude third parties from practicing relevant technology or prevent others from designing around our claims. If the breadth or strength of our intellectual property position with respect to our product candidates is threatened, it could dissuade companies from collaborating with us to develop and threaten our ability to commercialize our product candidates. In the event of litigation or administrative proceedings, we cannot be certain that the claims in any of our issued patents will be considered valid by courts in the United States or foreign countries.

***We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.***

We have employed and expect to employ individuals who were previously employed at universities, research institutions or other companies, including our competitors or potential competitors. Although we seek to protect our ownership of intellectual property rights by ensuring that our agreements with our employees, collaborators, and other third parties with whom we do business include provisions requiring such parties to not disclose the confidential information of their previous employers or other third parties, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of our employees’ former employers or other third parties. We or our licensors may also be subject to claims that former employers or other third parties have an ownership interest in our patents. Litigation may be necessary to defend against these claims. There is no guarantee of success in defending these claims, and if we or our licensors 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, valuable intellectual property. Even if we are successful, litigation could result in substantial cost and be a distraction to our management and other employees.

***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 rely heavily on trade secrets and confidentiality agreements to protect our unpatented know-how, technology and other proprietary information, including the design and features of our G4 Integrated Solution and our planned PX Integrated Solution, 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 from academic to industry scientific positions.

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 adversely impact our ability to establish or maintain a competitive advantage in the market, 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 in-licensed certain patents and other intellectual property rights from The Trustees of Columbia University in the City of New York (“Columbia”). If we fail to comply with the terms of our agreement with Columbia or have a disagreement with Columbia regarding our obligations thereunder, we may be subject to breach of contract claims or other actions by Columbia, which could harm our business, results of operations and financial condition.***

In August 2016, we entered into an Exclusive License Agreement with Columbia, which was subsequently amended in September 2016, November 2016 and June 2017 (the “License Agreement”). Under the License Agreement, we received (i) an exclusive, sublicensable, worldwide license under certain patents owned by Columbia to discover, develop, make and sell products or services covered by the claims of such licensed patents (the “Patent Products”), and (ii) an exclusive, sublicensable, worldwide license under certain materials and technical information provided by Columbia to discover, develop, make and sell products or services that directly use or incorporate such materials or information (the “Other Products”). Under the License Agreement, we are required to use commercially reasonable efforts to research, discover, develop and market Patent Products and/or Other Products and to achieve certain fundraising and development milestone events. For any products within the scope of the License Agreement that we commercialize, we are required to pay royalties ranging from low to mid-single digits on net sales of Patent Products and low single digit royalty rates on net sales of Other Products. We are also required to make milestone payments to Columbia upon our achievement of certain development and commercialization milestones, which could total up to \$3.9 million over the life of the License Agreement.

We do not believe that our G4 or PX Instruments or the associated consumables, as we presently intend to commercialize them, fit within the definitions of Patent Products or Other Products as defined in the License Agreement. As a result, we do not believe that we will be required to make milestone payments or pay royalties on sales of these products or any associated consumables or services based on our current commercialization plans. However, in the future, we may decide to incorporate features covered by one or more licensed patent(s) or directly use or incorporate materials and/or technical information provided by Columbia, such that we would incur milestone and royalty obligations under the License Agreement.

The License Agreement includes a number of diligence obligations that require us to use commercially reasonable efforts to research, discover, develop and market Patent Products and/or Other Products by certain dates. To the extent that we do not commercialize a Patent Product or Other Product, Columbia may contend that we have not complied with our diligence obligations under the License Agreement. In such case, Columbia could take the position that the License Agreement should convert to a non-exclusive license or pursue actions to terminate the License Agreement alleging that we have not satisfied our diligence obligations. Columbia could also file additional claims to the pending patent applications they licensed to us to attempt to cause our products to become Patent Products. Columbia could also disagree with our interpretation of our milestone and royalty obligations under the License Agreement and contend that a failure to make milestone payments or pay royalties constitutes a breach of the License Agreement. We are currently engaged in discussions with Columbia regarding the application of the License Agreement and our efforts to satisfy the diligence obligations under the License Agreement. There is no assurance that Columbia will agree with our interpretation of the License Agreement or our payment obligations thereunder or agree that we have complied with our diligence obligations.

Columbia has a right to pursue a termination of the License Agreement in the event we become insolvent or otherwise cease operations, in the event we materially breach our obligations under the License Agreement, or in the event we assert any claim challenging the validity or enforceability of any patent licensed to us by Columbia under the License Agreement. For example, Columbia may assert that we have breached the License Agreement if it disagrees with our determination that our G4 and PX Instruments and the associated consumables do not fit within the definitions of Patent Products or Other Products. In addition, to the extent that we do not commercialize a Patent or Other Product, Columbia may take the position that we have not complied with our diligence obligations under the License Agreement. There is no assurance that we can satisfy our obligations under the License Agreement, or that we and Columbia will agree on whether or not we have satisfied our obligations under the License Agreement, including whether any royalty or milestones, or the amount thereof, are payable under the terms of the License Agreement or whether we have satisfied our diligence obligations. If we fail to comply with our obligations, or if we and Columbia do not agree on whether we have satisfied our obligations under the License Agreement, Columbia could exercise its right to assert a breach of contract, convert the License Agreement to a non-exclusive license and/or pursue actions to terminate the License Agreement. Further, Columbia could seek to file additional claims to the pending patent applications they licensed to us to attempt to cause our products to become Patent Products. If we are required to defend against breach of contract or other claims and actions asserted by Columbia or if Columbia is successful in terminating the License Agreement or converting the License Agreement to a non-exclusive license, our business may be adversely affected. Further, if we are required to make additional milestone payments or pay Columbia royalties on our G4 and PX Instruments, and the consumables we have developed to date, our resulting operations and financial condition may be adversely affected.

***Patent terms may be inadequate to protect our competitive position on our products 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 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 impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Further, we may in the future enter into agreements with owners of such third-party trade names or trademarks to avoid potential trademark litigation which may limit 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 not be able to compete effectively, 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.

***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 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 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 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 may create 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 be certain 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 negative impact on our business, financial condition, prospects and results of operations.

***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. 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, the commercial release of our products could be delayed 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.

***Certain of 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, which may limit our ability to exclude third parties from commercializing products similar or identical to ours.***

Our future in-licensed patents may be subject to a reservation of rights by one or more third parties. For example, 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. Any failure to timely elect title to such inventions may provide the U.S. government to, at any time, take title 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 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 use of open source software may pose particular risks to our proprietary software and systems.***

We use open source software in our products and anticipate that we will continue to use open source software in the future. The licenses applicable to our use of open source software may require that source code that is developed using open source software be made available to the public and that any modifications or derivative works to certain open source software continue to be licensed under open source licenses. From time to time, we may face claims from third parties claiming infringement of their intellectual property rights, or demanding the release or license of the open source software or derivative works that we developed using such software (which could include our proprietary source code) or otherwise seeking to enforce the terms of the applicable open source license. These claims could result in litigation and could require us to purchase a costly license, publicly release the affected portions of our source code, be limited in or cease using the implicated software unless and until we can re-engineer such software to avoid infringement or change the use of, or remove, the implicated open source software. Our use of open source software may also present additional security risks because the source code for open source software is publicly available. Any of these risks could be difficult to eliminate or manage, and, if not addressed, could have a material adverse effect on our business, results of operations, financial condition, and prospects.

**Risks Related to Regulatory and Legal Compliance Matters**

***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.***

We intend to market and sell our G4 Integrated Solution and our planned PX Integrated Solution primarily to academic and research institutions and research companies, government laboratories, hospitals, and biotechnology, consumer genomics and proteomics, commercial molecular diagnostic laboratories, and agrigenomics companies as research use only (“RUO”) products. Our products are not currently designed, or intended to be used, for 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. For example, 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 May 26, 2017, with application dates of May 26, 2021 (postponed from 2020) and May 26, 2022 respectively. This will increase the difficulty of regulatory approvals in Europe in the future. 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 either our G4 Integrated Solution or our planned PX Integrated Solution to be subject to the clearance or approval of the FDA, as they are 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 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 if 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 RUO 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.

The FDA has historically exercised enforcement discretion in not enforcing the medical device regulations against laboratories offering LDTs. However, on October 3, 2014, the FDA issued two draft guidance documents that set forth the FDA's proposed risk-based framework for regulating LDTs, which are designed, manufactured, and used within a single laboratory. The draft guidance documents provide the anticipated details through which the FDA would propose to establish an LDT oversight framework, including premarket review for higher-risk LDTs, such as those that have the same intended use as FDA-approved or cleared companion diagnostic tests currently on the market. In January 2017, the FDA announced that it would not issue final guidance on the oversight of LDTs and manufacturers of products used for LDTs, but would seek further public discussion on an appropriate oversight approach, and give Congress an opportunity to develop a legislative solution. More recently, the FDA has issued warning letters to certain genomics labs for illegally marketing genetic tests that claim to predict patients' responses to specific medications, noting that the FDA has not created a legal "carve-out" for LDTs and retains discretion to take action when appropriate, such as when certain genomic tests raise significant public health concerns.

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. Our operations may subject us to certain of these health care laws through our customers who use our platform for the development or sale of diagnostic tests. Failure to comply with such laws and regulations, as applicable, may result in substantial penalties.

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 RUO 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.

As part of the previous Administration’s efforts to combat COVID-19 and consistent with former President Trump’s direction in Executive Orders 13771 and 13924, the Department of Health and Human Services (HHS) announced rescission of guidance and other informal issuances of the 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 Emergency Use Authorization request, respectively, but are not required to do so. However, laboratories opting to use LDTs without FDA premarket review or authorization would not be eligible for liability protection under the Public Readiness and Emergency Preparedness Act. While this action by HHS is expected to reduce the regulatory burden on clinical laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 that develop LDTs, it is unclear how this action as well as future legislation by federal and state governments and the FDA will impact the industry, including our business and that of our customers. Such HHS measure may compel the FDA to formalize earlier enforcement discretionary policies and informal guidance through notice-and-comment rulemaking and/or impose further restrictions on LDTs. HHS’ rescission policy may change over time and we cannot be certain if the new administration will withdraw Executive Orders 13771 and 13924. Congress could also enact legislation restricting LDTs. Any restrictions on LDTs by the FDA, HHS, Congress, or state regulatory authorities may decrease the demand for our products. The adoption of new restrictions on RUO products, whether by the FDA or Congress, could adversely affect demand for our specialized reagents and instruments. Further, we could be required to obtain premarket clearance or approval before we can sell our products to certain customers.

Additionally, in the United States and some foreign jurisdictions there have been, and continue to be, several legislative and regulatory changes and proposed reforms of the healthcare system in an effort to contain costs, improve quality, and expand access to care. Further, third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for medications and other health care products and services. Our ability to commercialize any of our products successfully, and our customers’ ability to commercialize their products successfully, will depend in part on the extent to which coverage and adequate reimbursement for these products and will be available from third-party payors. As such, cost containment reform efforts may result in an adverse effect on our operations.

***We are currently subject to, and may in the future become subject to additional, 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 is vital to our operations and business strategy. We are, and may increasingly become, subject to various laws and regulations, as well as contractual obligations, relating to data privacy and security in the jurisdictions in which we operate. 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 and inconsistently 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 California Consumer Privacy Act (“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. 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. Additionally, California voters approved a new privacy law, the California Privacy Rights Act (“CPRA”), in the November 3, 2020 election. Effective starting on January 1, 2023, the CPRA will significantly modify the CCPA, including by expanding consumers’ rights with respect to certain sensitive personal information. The CPRA also creates a new state agency that will be vested with authority to implement and enforce the CCPA and the CPRA. New legislation proposed or enacted in various other states will continue to shape the data privacy environment nationally. Certain state laws may be more stringent or broader in scope, or offer greater individual rights, with respect to confidential, sensitive and personal information than federal, international or other state laws, and such laws may differ from each other, which may complicate compliance efforts.

Further, 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” or “PHI”) and require the implementation of administrative, physical and technological safeguards to protect the privacy of PHI and ensure the confidentiality, integrity and availability of electronic PHI. 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, liability under federal or state laws that protect the privacy of personal information (such as the HIPAA and 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.

In Europe, the collection, use, storage, disclosure, transfer, or other processing of personal data regarding individuals in the European Economic Area (“EEA”), including personal health data, is subject to the GDPR, which became effective on May 25, 2018. The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches and taking certain measures when engaging third-party processors. The GDPR also imposes strict rules on the transfer of personal data to countries outside the EEA, including the United States, and permits data protection authorities to impose large penalties for violations of the GDPR, including potential fines of up to €20 million or 4% of annual global revenues, whichever is greater. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies and obtain compensation for damages resulting from violations of the GDPR. In addition, the GDPR includes restrictions on cross-border data transfers. The GDPR may increase our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, including as implemented by individual countries. Compliance with the GDPR will be a rigorous and time-intensive process that may increase our cost of doing business or require us to change our business practices, and despite those efforts, there is a risk that we may be subject to fines and penalties, litigation and reputational harm in connection with our European activities.

The exit of the United Kingdom (“UK”) from the EU, often referred to as Brexit, also has created uncertainty with regard to data protection regulation in the UK. Specifically, the UK exited the EU on January 1, 2020, subject to a transition period that ended December 31, 2020. Under the post-Brexit Trade and Cooperation Agreement between the EU and the UK, the UK and EU have agreed that transfers of personal data to the UK from EEA member states will not be treated as ‘restricted transfers’ to a non-EEA

country for a period of up to four months from January 1, 2021, plus a potential further two months extension (the “Extended Adequacy Assessment Period”). Although the current maximum duration of the Extended Adequacy Assessment Period is six months, it may end sooner, for example, in the event that the European Commission adopts an adequacy decision in respect of the UK, or the UK amends the UK GDPR and/or makes certain changes regarding data transfers under the UK GDPR/Data Protection Act 2018 without the consent of the EU (unless those amendments or decisions are made simply to keep relevant UK laws aligned with the EU’s data protection regime). If the European Commission does not adopt an ‘adequacy decision’ in respect of the UK prior to the expiry of the Extended Adequacy Assessment Period, from that point onwards the UK will be an ‘inadequate third country’ under the GDPR and transfers of personal data from the EEA to the UK will require a ‘transfer mechanism’ such as the Standard Contractual Clauses.

Further, the European Court of Justice (“ECJ”) invalidated the EU-U.S. Privacy Shield, which had enabled the transfer of personal data from the EU to the U.S. for companies that had self-certified to the Privacy Shield in July 2020. The ECJ decision also raised questions about the continued validity of one of the primary alternatives to the EU-U.S. Privacy Shield, namely the European Commission’s Standard Contractual Clauses, and EU regulators have issued additional guidance regarding considerations and requirements that we and other companies must consider and undertake when using the Standard Contractual Clauses. Although the EU has presented a new draft set of contractual clauses, at present, there are few, if any, viable alternatives to the EU-U.S. Privacy Shield and the Standard Contractual Clauses. To the extent that we were to rely on the EU-U.S. or Swiss-U.S. Privacy Shield programs, we will not be able to do so in the future, and the ECJ’s decision and other regulatory guidance or developments otherwise may impose additional obligations with respect to the transfer of personal data from the EU and Switzerland to the U.S., each of which could restrict our activities in those jurisdictions, limit our ability to provide our products and services in those jurisdictions, or increase our costs and obligations and impose limitations upon our ability to efficiently transfer personal data from the EU and Switzerland to the U.S.

We are in the process of evaluating compliance needs, and are still finalizing formal policies and procedures related to the storage, collection and processing of information, and still need to conduct internal or external data privacy audits, to ensure our compliance with all applicable data protection laws and regulations. Additionally, we still need to assess our third-party vendors’ compliance with applicable data protection laws and regulations. All of these evolving compliance and operational requirements 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, or 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 could 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.

***If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.***

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Our research and development and manufacturing operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risks of contamination or injury from these materials. We could be held liable for any resulting damages in the event of contamination or injury resulting from the use of hazardous materials by us, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

Although we maintain general liability insurance as well as workers’ compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research and development. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Further, with respect to the operations of our any future third-party contract manufacturers, it is possible that if they fail to operate in compliance with applicable environmental, health and safety laws and regulations or properly dispose of wastes associated with our products, we could be held liable for any resulting damages, suffer reputational harm or experience a disruption in the manufacture and supply of our product candidates or products. In addition, our supply chain may be adversely impacted if any of our

third-party contract manufacturers become subject to injunctions or other sanctions as a result of their non-compliance with environmental, health and safety laws and regulations.

***We are subject to U.S. and certain foreign export and import controls, sanctions, embargoes, anti-corruption laws, and anti-money laundering laws and regulations. Compliance with these legal standards could impair our ability to compete in domestic and international markets. We can face criminal liability and other serious consequences for violations, which can harm our business.***

We are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls, the U.S. Foreign Corrupt Practices Act of 1977, as amended, ("FCPA"), the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and other state and national anti-bribery and anti-money laundering laws in the countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors, and other collaborators from authorizing, promising, offering, or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. We may engage third parties to sell our products outside the United States, to conduct clinical trials, and/or to obtain necessary permits, licenses, patent registrations, and other regulatory approvals. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors, and other collaborators, even if we do not explicitly authorize or have actual knowledge of such activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences.

### **Risks Related to Ownership of our Common Stock**

***There has been no prior public market for our common stock, and we have a limited market for our common stock. The stock price of our common stock has been and may continue to be volatile or may decline regardless of our operating performance.***

There has been no public market for our common stock prior to our IPO and we currently have a limited trading market for our common stock. An active or liquid market in our common stock may not develop or, if it does develop, it may not be sustainable. The market price of our common stock may fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- the timing of our launch and commercialization of our products and degree to which such launch and commercialization meets the expectations of securities analysts and investors;
- actual or anticipated fluctuations in our operating results, including fluctuations in our quarterly and annual results;
- operating and research and development expenses exceed our plans and expectations;
- 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;
- variations in the financial results of competitive companies;
- the introduction and success of existing or new competitive businesses or technologies;
- announcements about new research programs or products by us or our competitors;
- announcements of new pricing or product bundling terms offered by our competitors;
- intellectual property litigation or developments in disputes concerning infringement of 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 genomics and proteomics sectors specifically;
- investor perceptions of us or our industry;
- the level of expenses related to any of our research and development programs or future products or product enhancements;
- actual or anticipated changes in our estimates as to our financial results or development timelines;
- changes in estimates or recommendations by securities analysts, if any, that cover our common stock or companies that are perceived to be similar to us;

- whether our financial results meet the expectations of securities analysts or investors;
- the announcement or expectation of additional financing efforts;
- sales of our common stock by us or sales of our common stock or common stock by our insiders or other stockholders;
- the expiration of market standoff or lock-up agreements;
- the COVID-19 pandemic, natural disasters or major catastrophic events; and
- general economic, industry and market conditions.

***Substantial amounts of our outstanding shares may be sold into the market when the lock-up period ends. If there are substantial sales of shares of our common stock, the price of our common stock could decline.***

The price of our common stock could decline if there are substantial sales of our common stock, particularly sales by our directors, executive officers and significant stockholders, or if there is a large number of shares of our common stock available for sale and the market perceives that sales will occur. All of the shares of common stock sold in our IPO are available for sale in the public market, unless purchased by our affiliates or existing stockholders. Substantially all of our existing outstanding shares of common stock are currently restricted from resale as a result of market-standoff agreements and “lock-up” agreements, which may be waived by J.P. Morgan Securities LLC and Goldman Sachs & Co. LLC with or without notice subject to certain exceptions. These shares will become available to be sold on November 23, 2021. Shares held by directors, executive officers and other affiliates will be subject to volume limitations under Rule 144 under the Securities Act of 1933, as amended (the “Securities Act”), and various vesting agreements.

Certain of our stockholders will have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or our stockholders, subject to lock-up agreements. We also intend to register shares of common stock that we have issued and may issue under our employee equity incentive plans. Once we register these shares, they will be able to be sold freely in the public market upon issuance, subject to existing market standoff or lock-up agreements.

The market price of the shares of our common stock could decline as a result of the sale of a substantial number of our shares of common stock in the public market or the perception in the market that the holders of a large number of shares intend to sell their shares.

***The concentration of our stock ownership will likely limit your ability to influence corporate matters, including the ability to influence the outcome of director elections and other matters requiring stockholder approval.***

Immediately following our IPO, our officers, directors and the holders of more than 5% of our outstanding stock collectively beneficially own approximately 51.3% of our common stock. As a result, these stockholders, acting together, will have significant influence over all matters that require approval by our stockholders, including the election of directors and approval of significant corporate transactions. Corporate actions might be taken even if other stockholders oppose them. This concentration of ownership might also have the effect of delaying or preventing a change of control of our company that other stockholders may view as beneficial.

***If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our results of operation 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 common stock.***

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in our 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. For example, in connection with the implementation of the new revenue accounting standard if and when we have 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, 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 common stock.

***We are an “emerging growth company,” and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.***

We are an “emerging growth company” as defined in the JOBS Act and we intend to take advantage of some of the exemptions from reporting requirements that are applicable to other public companies that are not emerging growth companies, including:

- the option to present only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced “Management’s Discussion and Analysis of Financial Condition and Results of Operations” disclosure;
- not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes Oxley Act;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements;
- not being required to disclose certain executive compensation-related items such as the correlation between executive compensation and performance and comparisons of the chief executive officer’s compensation to median employee compensation; and
- not being required to submit certain executive compensation matters to stockholder advisory votes, such as “say-on-pay,” “say-on-frequency,” and “say-on-golden parachutes.”

The JOBS Act permits an “emerging growth company” such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We have elected to avail ourselves of this exemption and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for private companies.

We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of our IPO, (b) in which we have total annual gross revenue of at least \$1.07 billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior September 30th and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period. Even after we no longer qualify as an emerging growth company, we may qualify as a “smaller reporting company,” which would allow us to take advantage of many of the same exemptions from disclosure requirements including reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, if either (i) the market value of our stock held by non-affiliates is less than \$250 million or (ii) our annual revenue is less than \$100 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than \$700 million.

***We do not intend to pay dividends for the foreseeable future.***

We have never declared nor paid cash dividends on our capital stock. We currently intend to retain any future earnings to finance the operation and expansion of our business, and we do not expect to declare or pay any dividends in the foreseeable future. The 2021 SVB Loan also contains a negative covenant that prohibits us from paying dividends subject to limited exceptions. Consequently, stockholders must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment.

***Delaware law and provisions in our amended and restated certificate of incorporation and amended and restated bylaws could make a merger, tender offer or proxy contest difficult, thereby depressing the trading price of our 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 amended and restated certificate of incorporation and amended and restated bylaws contain provisions that may make the acquisition of our company more difficult, including the following:

- a classified board of directors with three-year staggered terms, which could delay the ability of stockholders to change the membership of a majority of our board of directors;
- the ability of our board of directors to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of our board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;

- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by a majority vote of our entire board of directors, the chair of our board of directors or our chief executive officer, which could delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;
- the requirement for the affirmative vote of holders of at least 66 2/3% of the voting power of all of the then-outstanding shares of the voting stock, voting together as a single class, to amend the provisions of our amended and restated certificate of incorporation or our amended and restated bylaws, which may inhibit the ability of an acquirer to effect such amendments to facilitate an unsolicited takeover attempt; and
- advance notice procedures with which stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time. A Delaware corporation may opt out of this provision by express provision in its original certificate of incorporation or by amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out of this provision.

These and other provisions in our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law could make it more difficult for stockholders or potential acquirers to obtain control of our board of directors or initiate actions that are opposed by our then-current board of directors, including delay or impede a merger, tender offer or proxy contest involving our company. The existence of these provisions could negatively affect the price of our common stock and limit opportunities for you to realize value in a corporate transaction.

***Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware and the U.S. federal district courts are the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.***

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty, any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation or our bylaws or any action asserting a claim against us that is governed by the internal affairs doctrine.

This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act. Furthermore, Section 22 of 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 certificate of incorporation further provides that the U.S. federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, including all causes of action asserted against any defendant named in such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our certificate of incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees and may discourage these types of lawsuits. Alternatively, if a court were to find the choice of forum provision contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions.

## **General Risk Factors**

***If securities or industry analysts cease publishing research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.***

The trading market for our common stock will depend in part on the research and reports published by securities or industry analysts about us or our business. Securities and industry analysts currently publish research on our company. If analysts cease coverage of us, the trading price for our common stock could be negatively affected. If one or more of the analysts who cover us downgrade our common stock or publish inaccurate or unfavorable research about our business, our common stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our common stock could decrease, which might cause our common stock price and trading volume to decline.

***We could be subject to securities class action litigation.***

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because our stock price has declined since our IPO, and life science technology companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

***Requirements associated with being a public company have increased and will increase our costs significantly, as well as divert significant company resources and management attention.***

We are subject to the reporting requirements of the Exchange Act, or the other rules and regulations of the SEC, or any securities exchange relating to public companies. Compliance with the various reporting and other requirements applicable to public companies requires considerable time and attention of management and we will incur significant legal, accounting and other expenses that we did not incur as a private company. We cannot assure you that we will satisfy our obligations as a public company on a timely basis.

In addition, as a public company, it may be more difficult or more costly for us to obtain certain types of insurance, including directors' and officers' liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified personnel to serve on our board of directors, our board committees or as executive officers.

***If we fail to maintain proper and effective internal controls, our ability to produce accurate and timely financial statements could be impaired, which could result in sanctions or other penalties that would harm our business.***

We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act and the rules and regulations of the Nasdaq Global Select Market. The Sarbanes Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal controls over financial reporting. Commencing with our fiscal year ending the year after the completion of our IPO, we must perform system and process design evaluation and testing of the effectiveness of our internal controls over financial reporting to allow management to report on the effectiveness of our internal controls over financial reporting in our Form 10-K filing for that year, as required by Section 404 of the Sarbanes-Oxley Act. To achieve compliance with Section 404 within the prescribed period, we will be 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, including through hiring additional financial and accounting personnel, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. This will require that we incur substantial additional professional fees and internal costs to expand our accounting and finance functions and that we expend significant management efforts. Prior to our IPO, we have never been required to test our internal controls within a specified period and, as a result, we may experience difficulty in meeting these reporting requirements in a timely manner.

We may discover weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our financial statements. Our internal control over financial reporting will not prevent or detect all errors 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. 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 will be detected.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls over financial reporting, we may not be able to produce timely and accurate financial statements. If that were to happen, our investors could lose confidence in our reported financial information, the market price of our stock could decline and we could be subject to sanctions or investigations by the SEC or other regulatory authorities including equivalent foreign authorities.

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

### **Use of Proceeds from Public Offering of Common Stock**

On May 26, 2021, our Registration Statement on Form S-1 (File No. 333-255912) (“Registration Statement”) relating to the initial public offering of our common stock (“IPO”) was declared effective by the SEC. Pursuant to such Registration Statement, we sold an aggregate of 11,730,000 shares of our common stock, which includes 1,530,000 shares sold pursuant to the underwriters’ full exercise of their option to purchase additional shares, at a price to the public of \$22.00 per share. The aggregate offering price for shares sold in the offering was \$258.1 million. On June 1, 2021, we closed the sale of such shares, resulting in aggregate cash proceeds to us of approximately \$237.2 million, net of underwriting discounts, commissions and offering expenses paid or payable by us. No offering expenses were paid or are payable, directly or indirectly, to our directors or officers, to persons owning 10% or more of any class of our equity securities or to any of our affiliates. There has been no material change in the planned use of proceeds from our IPO as described in the final prospectus, dated May 26, 2021, filed with the SEC on May 28, 2021, pursuant to Rule 424(b) of the Securities Act.

### **Item 3. Defaults upon Senior Securities**

None.

### **Item 4. Mine Safety Disclosures**

None.

### **Item 5. Other Information**

None.

**Item 6. Exhibits**

<b>Exhibit Number</b>	<b>Description</b>	<b>Form</b>	<b>File No.</b>	<b>Incorporated by Reference Exhibit</b>	<b>Filing Date</b>	<b>Filed Herewith</b>
3.1	<a href="#">Amended and Restated Certificate of Incorporation of Registrant.</a>	8-K	001-40443	3.1	June 1, 2021	
3.2	<a href="#">Amended and Restated Bylaws of Registrant.</a>	8-K	001-40443	3.2	June 1, 2021	
10.1	<a href="#">Amended and Restated Loan and Security Agreement, dated September 30, 2021, by and between the Registrant and Silicon Valley Bank.</a>					X
31.1*	<a href="#">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.</a>					X
31.2*	<a href="#">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.</a>					X
32.1*	<a href="#">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.</a>					X
32.2*	<a href="#">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.</a>					X
101.INS	Inline XBRL Instance Document - The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document.					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.					X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).					X

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Quarterly Report on Form 10-Q to be signed on its behalf by the undersigned, thereunto duly authorized.

**SINGULAR GENOMICS SYSTEMS, INC.**

Date: November 9, 2021

*/s/ Andrew Spaventa*

---

Andrew Spaventa

Chief Executive Officer

(Principal Executive Officer)

Date: November 9, 2021

*/s/ Dalen Meeter*

---

Dalen Meeter

Senior Vice President, Finance

(Principal Financial Officer and Principal Accounting Officer)

## AMENDED AND RESTATED LOAN AND SECURITY AGREEMENT

**THIS AMENDED AND RESTATED LOAN AND SECURITY AGREEMENT** (this “**Agreement**”) is dated as of the Effective Date between **SILICON VALLEY BANK**, a California corporation (“**Bank**”), and the borrower listed on Schedule I hereto (“**Borrower**”). The parties agree as follows:

### Recitals

**A.** Bank and Borrower have entered into that certain Loan and Security Agreement dated as of November 19, 2019 (as amended, the “**Prior Loan Agreement**”).

**B.** Borrower has requested, and Bank has agreed, to amend and restate the Prior Loan Agreement in its entirety. Bank and Borrower hereby agree that the Prior Loan Agreement is amended and restated in its entirety as follows:

### **1 LOAN AND TERMS OF PAYMENT**

#### **1.1 Reserved.**

#### **1.2 Term Loan.**

(a) Availability. Subject to the terms and conditions of this Agreement, upon Borrower’s request, during the Draw Period, Bank shall make term loan advances not exceeding the Term Loan Availability Amount (each such advance is referred to herein as a “**Term Loan Advance**” and, collectively, as the “**Term Loan Advances**”). Borrower may request Term Loan Advances as set forth on Schedule I hereto.

(b) Repayment. Borrower shall repay each Term Loan Advance as set forth in Schedule I hereto. All outstanding principal and accrued and unpaid interest under each Term Loan Advance, and all other outstanding Obligations with respect to such Term Loan Advance, are due and payable in full on the Term Loan Maturity Date.

(c) Permitted Prepayment. Borrower shall have the option to prepay all, but not less than all, of the Term Loan Advances, provided Borrower (i) delivers written notice to Bank of its election to prepay the Term Loan Advances at least ten (10) days prior to such prepayment, and (ii) pays, on the date of such prepayment (A) the outstanding principal plus accrued and unpaid interest with respect to the Term Loan Advances, (B) the Term Loan Prepayment Fee, (C) the Term Loan Final Payment and (D) all other sums, if any, that shall have become due and payable with respect to the Term Loan Advances, including interest at the Default Rate with respect to any past due amounts.

(d) Mandatory Prepayment Upon an Acceleration. If the Term Loan Advances are accelerated by Bank following the occurrence and during the continuance of an Event of Default, Borrower shall immediately pay to Bank an amount equal to the sum of (i) all outstanding principal plus accrued and unpaid interest with respect to the Term Loan Advances, (ii) the Term Loan Prepayment Fee, (iii) the Term Loan Final Payment and (iv) all other sums, if any, that shall have become due and payable with respect to the Term Loan Advances, including interest at the Default Rate with respect to any past due amounts.

#### **1.2 Reserved.**

#### **1.3 Payment of Interest on the Credit Extensions.**

(a) Interest Payments.

(i) Term Loan Advances. Interest on the principal amount of each Term Loan Advance is payable as set forth on Schedule I hereto.

(b) Interest Rate.

---

(i) Term Loan Advances. Subject to Section 1.4(c), the outstanding principal amount of any Term Loan Advance shall accrue interest as set forth on Schedule I hereto.

(ii) All-In Rate. Notwithstanding any terms in this Agreement to the contrary, if at any time the interest rate applicable to any Obligations is less than zero percent (0.00%), such interest rate shall be deemed to be zero percent (0.00%) for all purposes of this Agreement.

(c) Default Rate. Immediately upon the occurrence and during the continuance of an Event of Default, the outstanding Obligations shall bear interest at a rate per annum which is three percent (3.00%) above the rate that is otherwise applicable thereto (the “**Default Rate**”). Fees and expenses which are required to be paid by Borrower pursuant to the Loan Documents (including, without limitation, Bank Expenses) but are not paid when due shall bear interest until paid at a rate equal to the highest rate applicable to the Obligations. Payment or acceptance of the increased interest rate provided in this Section 1.4(c) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Bank.

(d) Adjustment to Interest Rate. Each change in the interest rate applicable to any amounts payable under the Loan Documents based on changes to the Prime Rate shall be effective on the effective date of any change to the Prime Rate and to the extent of such change.

(e) Interest Computation. Interest shall be computed as set forth on Schedule I hereto. In computing interest, the date of the making of any Credit Extension shall be included and the date of payment shall be excluded; provided, however, that if any Credit Extension is repaid on the same day on which it is made, such day shall be included in computing interest on such Credit Extension.

**1.2 Fees.** Borrower shall pay to Bank:

(a) Term Loan Prepayment Fee. The Term Loan Prepayment Fee, when due hereunder, which shall be fully earned and non-refundable as of such date;

(b) Term Loan Final Payment. The Term Loan Final Payment, when due hereunder, which shall be fully earned and non-refundable as of such date; and

(c) Bank Expenses. All Bank Expenses incurred through and after the Effective Date, when due (or, if no stated due date, upon demand by Bank).

Unless otherwise provided in this Agreement or in a separate writing by Bank, Borrower shall not be entitled to any credit, rebate, or repayment of any fees earned by Bank pursuant to this Agreement notwithstanding any termination of this Agreement or the suspension or termination of Bank’s obligation to make loans and advances hereunder. Bank may deduct amounts owing by Borrower under the clauses of this Section 1.5 pursuant to the terms of Section 1.6(c). Bank shall provide Borrower written notice of deductions made pursuant to the terms of the clauses of this Section 1.5.

**1.3 Payments; Application of Payments; Debit of Accounts.**

(a) All payments (including prepayments) to be made by Borrower under any Loan Document shall be made in immediately available funds in Dollars, without setoff, counterclaim, or deduction, before 12:00 p.m. Pacific time on the date when due. Payments of principal and/or interest received after 12:00 p.m. Pacific time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment shall be due the next Business Day, and additional fees or interest, as applicable, shall continue to accrue until paid.

(b) Bank has the exclusive right to determine the order and manner in which all payments with respect to the Obligations may be applied. Borrower shall have no right to specify the order or the accounts to which Bank shall allocate or apply any payments required to be made by Borrower to Bank or otherwise received by Bank under this Agreement when any such allocation or application is not specified elsewhere in this Agreement.

(c) Bank may debit any of Borrower's deposit accounts maintained with Bank, including the Designated Deposit Account, for principal and interest payments or any other amounts Borrower owes Bank when due under the Loan Documents. These debits shall not constitute a set-off.

#### 1.4 Change in Circumstances.

(a) Increased Costs. If any Change in Law shall: (i) impose, modify or deem applicable any reserve, special deposit, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or advances, loans or other credit extended or participated in by, Bank, (ii) subject Bank to any Taxes (other than (A) Indemnified Taxes, (B) Taxes described in clauses (b) through (d) of the definition of Excluded Taxes, and (C) Connection Income Taxes) on its loans, loan principal, letters of credit, commitment, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto, or (iii) impose on Bank any other condition, cost or expense (other than Taxes) affecting this Agreement or Credit Extensions made by Bank, and the result of any of the foregoing shall be to increase the cost to Bank of making, converting to, continuing or maintaining any Credit Extension (or of maintaining its obligation to make any such Credit Extension), or to reduce the amount of any sum received or receivable by Bank hereunder (whether of principal, interest or any other amount) then, upon written request of Bank, Borrower shall promptly pay to Bank such additional amount or amounts as will compensate Bank for such additional costs incurred or reduction suffered.

(b) Capital Requirements. If Bank determines that any Change in Law affecting Bank regarding capital or liquidity requirements, has or would have the effect of reducing the rate of return on Bank's capital as a consequence of this Agreement or the Credit Extensions made by Bank to a level below that which Bank could have achieved but for such Change in Law (taking into consideration Bank's policies with respect to capital adequacy and liquidity), then from time to time upon written request of Bank, Borrower shall promptly pay to Bank such additional amount or amounts as will compensate Bank for any such reduction suffered.

(c) Delay in Requests. Failure or delay on the part of Bank to demand compensation pursuant to this Section 1.7 shall not constitute a waiver of Bank's right to demand such compensation; provided that Borrower shall not be required to compensate Bank pursuant to subsection (a) for any increased costs incurred or reductions suffered more than nine (9) months prior to the date that Bank notifies Borrower of the Change in Law giving rise to such increased costs or reductions (except that if the Change in Law giving rise to such increased costs or reductions is retroactive, then the nine (9) month period shall be extended to include the period of retroactive effect).

#### 1.5 Taxes.

(a) Payments Free of Taxes. Any and all payments by or on account of any obligation of Borrower under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by Applicable Law. If any Applicable Law (as determined in the good faith discretion of Borrower) requires the deduction or withholding of any Tax from any such payment by Borrower, then (i) Borrower shall be entitled to make such deduction or withholding, (ii) Borrower shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with Applicable Law, and (iii) if such Tax is an Indemnified Tax, the sum payable by Borrower shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Section 1.8) Bank receives an amount equal to the sum it would have received had no such deduction or withholding been made.

(b) Payment of Other Taxes by Borrower. Without limiting the provisions of subsection (a) above, Borrower shall timely pay any Other Taxes to the relevant Governmental Authority in accordance with Applicable Law.

(c) Tax Indemnification. Without limiting the provisions of subsections (a) and (b) above, Borrower shall, and does hereby, indemnify Bank, within ten (10) days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 1.8) payable or paid by Bank or required to be withheld or deducted from a payment to Bank and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to Borrower by Bank shall be conclusive absent manifest error.

(d) Evidence of Payments. As soon as practicable after any payment of Taxes by Borrower to a Governmental Authority pursuant to this Section 1.8, Borrower shall deliver to Bank a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to Bank.

(e) Status of Bank. If Bank (including any assignee or successor) is entitled to an exemption from or reduction of withholding tax with respect to payments made under any Loan Document, it shall deliver to Borrower, at the time or times reasonably requested by Borrower, such properly completed and executed documentation reasonably requested by Borrower as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, Bank, if reasonably requested by Borrower, shall deliver such other documentation prescribed by Applicable Law or reasonably requested by Borrower as will enable Borrower to determine whether or not Bank is subject to backup withholding or information reporting requirements. Without limiting the generality of the foregoing, Bank shall deliver whichever of IRS Form W-9, IRS Form W-8BEN-E, IRS Form W-8ECI or W-8IMY is applicable, as well as any applicable supporting documentation or certifications.

## 1.6 Procedures for Borrowing.

(a) Term Loan Advances. Subject to the prior satisfaction of all other applicable conditions to the making of a Term Loan Advance set forth in this Agreement (which must be satisfied no later than 12:00 p.m. Pacific time on the applicable Funding Date), to obtain a Term Loan Advance, Borrower shall notify Bank (which notice shall be irrevocable) by 12:00 p.m. Pacific time on the Funding Date of the Term Loan Advance. Such notice shall be made by electronic mail or by telephone and, together with any such notification, Borrower shall deliver to Bank by electronic mail a completed Payment/Advance Form executed by an Authorized Signer and such other reports and information as Bank may reasonably request. Bank may rely on any telephone notice given by a person whom Bank believes is an Authorized Signer. Borrower will indemnify Bank for any loss Bank suffers due to such belief or reliance. Bank shall have received satisfactory evidence that the Board has approved that such Authorized Signer may provide such notices and request such Term Loan Advance (which requirement may be deemed satisfied by the prior delivery of Borrowing Resolutions or a secretary's certificate that certifies as to such Board approval).

(b) Bank shall credit proceeds of a Credit Extension to the Designated Deposit Account. Bank may make Term Loan Advances under this Agreement based on instructions from an Authorized Signer or without instructions if such Term Loan Advances are necessary to meet Obligations which have become due.

## 2 CONDITIONS OF CREDIT EXTENSIONS

**2.1 Conditions Precedent to Initial Credit Extension.** Bank's obligation to make the initial Credit Extension on or after the Effective Date is subject to the condition precedent that Bank shall have received, in form and substance satisfactory to Bank, such documents, and completion of such other matters, as Bank may reasonably deem necessary or appropriate, including, without limitation:

(a) duly executed Loan Documents;

(b) the Operating Documents of Borrower and long-form good standing certificates of Borrower certified by the Secretary of State of the State of Delaware and the Secretary of State (or equivalent agency) of each other jurisdiction in which Borrower is qualified to conduct business, in each case as of a date no earlier than thirty (30) days prior to the Effective Date;

(c) certificate duly executed by a Responsible Officer or secretary of Borrower with respect to Borrower's (i) Operating Documents and (ii) Borrowing Resolutions;

(d) certified copies, dated as of a recent date, of searches for financing statements as Bank may request, in its commercially reasonable discretion, accompanied by written evidence (including any UCC termination statements) that the Liens indicated in any such financing statements either constitute Permitted Liens or have been or, in connection with the initial Credit Extension, will be terminated or released;

(e) duly executed Perfection Certificate of Borrower;

(f) reserved;

(g) reserved;

(h) evidence satisfactory to Bank that the insurance policies and endorsements required by Section 5.8 hereof are in full force and effect, together with appropriate evidence showing lender loss payable and additional insured clauses or endorsements in favor of Bank; and

(i) payment of the fees and Bank Expenses then due as specified in Section 1.5 hereof.

**2.2 Conditions Precedent to all Credit Extensions.** Bank's obligation to make each Credit Extension, including the initial Credit Extension, is subject to the following conditions precedent:

(a) receipt of Borrower's Credit Extension request and the related materials and documents as required by and in accordance with Section 1.9;

(b) the representations and warranties in this Agreement shall be true and correct in all material respects as of the date of any Credit Extension request and as of the Funding Date of each Credit Extension; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true and correct in all material respects as of such date, and no Default or Event of Default shall have occurred and be continuing or result from the Credit Extension. Each Credit Extension is Borrower's representation and warranty on that date that the representations and warranties in this Agreement remain true and correct in all material respects; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true and correct in all material respects as of such date; and

(c) a Material Adverse Change shall not have occurred and be continuing.

**2.3 Covenant to Deliver.** Borrower shall deliver to Bank each item required to be delivered to Bank under this Agreement as a condition precedent to any Credit Extension. A Credit Extension made prior to the receipt by Bank of any such item shall not constitute a waiver by Bank of Borrower's obligation to deliver such item, and the making of any Credit Extension in the absence of a required item shall be in Bank's sole discretion.

**2.4 Post-Closing Conditions.** Borrower shall deliver to Bank, in form and substance satisfactory to Bank, in its commercially reasonable discretion, within forty-five (45) days after the Effective Date, duly executed landlord's consents in favor of Bank for the Borrower's leased premises located at (i) 10010 Mesa Rim, San Diego, CA 92121; and (ii) 10931 N. Torrey Pines Road, La Jolla, California 92037, executed by each respective landlord thereof.

### **3 CREATION OF SECURITY INTEREST**

#### **3.1 Grant of Security Interest.**

(a) Borrower hereby grants Bank, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledges to Bank, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof.

(b) Borrower acknowledges that it previously has entered, or may in the future enter, into Bank Services Agreements with Bank. Regardless of the terms of any Bank Services Agreement, Borrower agrees that any amounts Borrower owes Bank thereunder shall be deemed to be Obligations hereunder and that it is the intent of Borrower and Bank to have all such Obligations secured by the first priority perfected security interest in the Collateral granted herein (subject to Permitted Liens).

**3.2 Authorization to File Financing Statements.** Borrower hereby authorizes Bank to file financing statements, without notice to Borrower, with all jurisdictions deemed necessary or appropriate by Bank to perfect or protect Bank's interest or rights hereunder, including a notice that any disposition of the Collateral, by either Borrower or any other Person, shall be deemed to violate the rights of Bank under the Code. Such financing statements may indicate the Collateral as "all assets of the Debtor" or words of similar effect.

**3.3 Termination.** If this Agreement is terminated, Bank's Lien in the Collateral shall continue until the Obligations (other than inchoate indemnity obligations) are repaid in full in cash. Upon payment in full in cash of the Obligations (other than inchoate indemnity obligations) and at such time as Bank's obligation to make Credit Extensions has terminated, Bank shall, at Borrower's sole cost and expense, terminate its security interest in the Collateral and all rights therein shall revert to Borrower. In the event (a) all Obligations (other than inchoate indemnity obligations), except for Bank Services, are satisfied in full, and (b) this Agreement is terminated, Bank shall terminate the security interest granted herein upon Borrower providing cash collateral acceptable to Bank in its commercially reasonable discretion for Bank Services, if any. In the event such Bank Services consist of outstanding Letters of Credit, Borrower shall provide to Bank cash collateral in an amount equal to at least (x) one hundred five percent (105%) of the face amount of all such Letters of Credit denominated in Dollars and (y) one hundred fifteen percent (115%) of the Dollar Equivalent of the face amount of all such Letters of Credit denominated in a Foreign Currency, plus, in each case, all interest, fees, and costs due or estimated by Bank, in its commercially reasonable discretion, to become due in connection therewith, to secure all of the Obligations relating to such Letters of Credit.

#### **4 REPRESENTATIONS AND WARRANTIES**

Borrower represents and warrants to Bank as follows:

##### **4.1 Due Organization, Authorization; Power and Authority.**

(a) Borrower and each of its Subsidiaries are each duly existing and in good standing as a Registered Organization in their respective jurisdiction of formation and are qualified and licensed to do business and is in good standing in any jurisdiction in which the conduct of their respective business or their ownership of property requires that they be qualified except where the failure to do so could not reasonably be expected to have a material adverse effect on Borrower's business or operations.

(b) All information set forth on the Perfection Certificate pertaining to Borrower and each of its Subsidiaries is true and correct (it being understood and agreed that Borrower may from time to time update certain information in the Perfection Certificate after the Effective Date to the extent permitted by one or more specific provisions in this Agreement and the Perfection Certificate shall be deemed to be updated to the extent such notice is provided to Bank of such permitted update).

(c) The execution, delivery and performance by Borrower and each of its Subsidiaries of the Loan Documents to which it is a party have been duly authorized, and do not (i) conflict with any of Borrower's or any such Subsidiary's organizational documents, (ii) contravene, conflict with, constitute a default under or violate any material Applicable Law, (iii) contravene, conflict with or violate any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which Borrower or any of its Subsidiaries or any of their property or assets may be bound or affected, (iv) require any action by, filing, registration, or qualification with, or Governmental Approval from, any Governmental Authority (except such Governmental Approvals which have already been obtained and are in full force and effect) that could reasonably be expected to have a material adverse effect on Borrower's business or operations,, or (v) conflict with, contravene, constitute a default or breach under, or result in or permit the termination or acceleration of, any material agreement by which Borrower or any of its Subsidiaries is bound. Neither Borrower nor any of its Subsidiaries are in default under any agreement to which it is a party or by which it is bound in which the default could reasonably be expected to have a material adverse effect on Borrower's or any of its Subsidiary's business or operations.

##### **4.2 Collateral.**

(a) The security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral (subject to Permitted Liens). Borrower has good title to, rights in, and the

power to transfer each item of the Collateral upon which it purports to grant a Lien hereunder, free and clear of any and all Liens except Permitted Liens.

(b) Borrower has no Collateral Accounts at or with any bank or financial institution other than Bank or Bank's Affiliates except for the Collateral Accounts described in the Perfection Certificate delivered to Bank in connection herewith and which Borrower has taken such actions as are necessary to give Bank a perfected security interest therein, pursuant to the terms of Section 5.9(c). The Accounts are bona fide, existing obligations of the Account Debtors.

(c) The Collateral is not in the possession of any third party bailee (such as a warehouse) except as otherwise provided in the Perfection Certificate or as permitted pursuant to Section 6.2. None of the components of the Collateral shall be maintained at locations other than as provided in the Perfection Certificate or as permitted pursuant to Section 6.2.

(d) All Inventory is in all material respects of good and marketable quality, free from material defects.

(e) Borrower owns, or possesses the right to use to the extent necessary in its business, all Intellectual Property, licenses and other intangible assets that are used in the conduct of its business as now operated, except to the extent that such failure to own or possess the right to use such asset would not reasonably be expected to have a material adverse effect on Borrower's business or operations, and no such Intellectual Property, licenses and other intangible assets, to the best knowledge of Borrower, conflicts with the valid Intellectual Property, license, or intangible asset of any other Person to the extent that such conflict could reasonably be expected to have a material adverse effect on Borrower's business or operations.

(f) Except as noted on the Perfection Certificate or for which notice has been given to Bank pursuant to and in accordance with Section 5.11(b), Borrower is not a party to, nor is it bound by, any Restricted License.

#### **4.3 Reserved.**

**4.4 Litigation.** Other than as set forth in the Perfection Certificate or as disclosed to Bank pursuant to Section 5.3(h), there are no actions, investigations or proceedings pending or, to the knowledge of any Responsible Officer, threatened in writing by or against Borrower or any of its Subsidiaries involving more than, individually or in the aggregate, One Million Dollars (\$1,000,000) not covered by independent third party insurance as to which liability has been accepted by the carrier providing such insurance.

**4.5 Financial Statements; Financial Condition.** All consolidated financial statements for Borrower and any of its Subsidiaries delivered to Bank by submission to the Financial Statement Repository or otherwise submitted to Bank fairly present in all material respects Borrower's consolidated financial condition and Borrower's consolidated results of operations for the periods covered thereby, subject, in the case of unaudited financial statements, to normal year-end adjustments and the absence of footnote disclosures. There has not been any material deterioration in Borrower's consolidated financial condition since the date of the most recent financial statements submitted to the Financial Statement Repository or otherwise submitted to Bank.

**4.6 Solvency.** The fair salable value of Borrower's consolidated assets (including goodwill minus disposition costs) exceeds the fair value of Borrower's liabilities; Borrower is not left with unreasonably small capital after the transactions in this Agreement; and Borrower and each of its Subsidiaries are able to pay their debts (including trade debts) as they mature.

**4.7 Regulatory Compliance.** Borrower is not an "investment company" or a company "controlled" by an "investment company" under the Investment Company Act of 1940, as amended. Borrower is not engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Borrower and each of its Subsidiaries (a) have complied in all material respects with all Applicable Law, and (b) have not violated any Applicable Law the violation of which could reasonably be expected to have a material adverse effect on Borrower's business or operations. Borrower and each of its Subsidiaries have

duly complied with, and their respective facilities, business, assets, property, leaseholds, real property and Equipment are in compliance with, Environmental Laws, except where the failure to do so could not reasonably be expected to have a material adverse effect on Borrower's business or operations; there have been no outstanding citations, notices or orders of non-compliance issued to Borrower or any of its Subsidiaries or relating to their respective facilities, businesses, assets, property, leaseholds, real property or Equipment under such Environmental Laws. Borrower and each of its Subsidiaries have obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Governmental Authorities that are necessary to continue their respective businesses as currently conducted, except where the failure to obtain or make or file the same would not reasonably be expected to have a material adverse effect on Borrower's business or operations.

**4.8 Subsidiaries; Investments.** Borrower does not own any stock, partnership, or other ownership interest or other equity securities except for Permitted Investments.

**4.9 Tax Returns and Payments; Pension Contributions.**

(a) Borrower and each of its Subsidiaries have timely filed, or submitted extensions for, all required Tax returns and reports, and Borrower and each of its Subsidiaries have timely paid all foreign, federal, state and local Taxes owed by Borrower and each of its Subsidiaries except (a) to the extent such Taxes are being contested in good faith by appropriate proceedings promptly instituted and diligently conducted, so long as such reserve or other appropriate provision, if any, as shall be required in conformity with GAAP shall have been made therefor, or (b) if such Taxes do not, individually or in the aggregate, exceed Fifty Thousand Dollars (\$50,000). Borrower is unaware of any claims or adjustments proposed for any of Borrower's or any of its Subsidiary's prior Tax years which could reasonably be expected to result in additional Taxes becoming due and payable by Borrower or any of its Subsidiaries in excess of Fifty Thousand Dollars (\$50,000) in the aggregate.

(b) Borrower and each of its Subsidiaries have paid all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms, and neither Borrower nor any of its Subsidiaries has withdrawn from participation in, and has not permitted partial or complete termination of, or permitted the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of Borrower or any of its Subsidiaries, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other Governmental Authority.

**4.10 Full Disclosure.** No written representation, warranty or other statement of Borrower or any of its Subsidiaries in any written report, certificate or written statement submitted to the Financial Statement Repository or otherwise submitted to Bank by Borrower, as of the date such representation, warranty, or other statement was made, taken together with all such written reports, certificates and written statements submitted to the Financial Statement Repository or otherwise submitted to Bank by Borrower, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the written reports, certificates or written statements not misleading in any material respect in light of the circumstances under which they were made (it being recognized by Bank that the projections and forecasts provided by Borrower or any of its Subsidiaries in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

**4.11 Sanctions.** Neither Borrower nor any of its Subsidiaries is: (a) in violation of any Sanctions; or (b) a Sanctioned Person. Neither Borrower nor any of its Subsidiaries, directors, officers, employees, agents or Affiliates: (i) conducts any business or engages in any transaction or dealing with any Sanctioned Person, including making or receiving any contribution of funds, goods or services to or for the benefit of any Sanctioned Person; (ii) deals in, or otherwise engages in any transaction relating to, any property or interests in property blocked pursuant to any Sanctions; (iii) engages in or conspires to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in any Sanctions; or (iv) otherwise engages in any transaction that could cause Bank to violate any Sanctions.

**5 AFFIRMATIVE COVENANTS**

Borrower shall do all of the following:

**5.1 Use of Proceeds.** Cause the proceeds of the Credit Extensions to be used (a) with respect to the initial Term Loan Advance (or a portion thereof, as applicable), for the repayment in full of all outstanding Obligations (as such term is defined in the Prior Loan Agreement) under the Prior Loan Agreement; and (b) with respect to the portion of the initial Term Loan Advance not used for refinancing (if any) and all other Term Loan Advances, (i) as working capital or (ii) to fund its general business purposes, and not for personal, family, household or agricultural purposes.

**5.2 Government Compliance.**

(a) Maintain its and all of its Subsidiaries' legal existence (except as permitted under Section 6.3 with respect to Subsidiaries only) and good standing in their respective jurisdictions of formation and maintain qualification in each jurisdiction in which the failure to so qualify would reasonably be expected to have a material adverse effect on Borrower's business or operations. Borrower shall comply, and have each Subsidiary comply, in all material respects, with all laws, ordinances and regulations to which it is subject.

(b) Obtain all of the Governmental Approvals necessary for the performance by Borrower and each of its Subsidiaries of their obligations under the Loan Documents to which it is a party, including any grant of a security interest to Bank. Borrower shall promptly provide copies of any such obtained Governmental Approvals to Bank.

**5.3 Financial Statements, Reports, Certificates.** Deliver to Bank by submitting to the Financial Statement Repository:

(a) Quarterly Financial Statements. As soon as available, and in any event within forty-five (45) days after the end of each fiscal quarter of Borrower (within ninety (90) days after the end of the fourth fiscal quarter of each fiscal year), company prepared consolidated balance sheet and income statement covering Borrower's consolidated operations for such quarter in a form consistent with those filed with the SEC and reasonably acceptable to Bank;

(b) Compliance Statement. Within forty-five (45) days after the last day of each fiscal quarter (within ninety (90) days after the end of the fourth fiscal quarter of each fiscal year) and together with the statements set forth in Section 5.3(a) and (d), a duly completed Compliance Statement, confirming that as of the end of such fiscal quarter, Borrower was in full compliance with all of the terms and conditions of this Agreement, and such other information as Bank may reasonably request;

(c) Annual Operating Budget and Financial Projections. No later than forty-five (45) days after the end of each fiscal year of Borrower, and contemporaneously with any updates or amendments thereto, (i) annual operating budgets (including income statements, balance sheets and cash flow statements, by month) for the upcoming fiscal year of Borrower, and (ii) annual financial projections for the following fiscal year (on a quarterly basis), in each case as approved by the Board, together with any related business forecasts used in the preparation of such annual financial projections;

(d) Reserved.

(e) SEC Filings. Within five (5) Business Days of filing, notification of the filing and copies of all periodic and other reports, proxy statements and other materials filed by Borrower and/or any of its Subsidiaries or any Guarantor with the SEC, any Governmental Authority succeeding to any or all of the functions of the SEC or with any national securities exchange, or distributed to its shareholders, as the case may be. Documents required to be delivered pursuant to the terms hereof (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date

(i) on which such materials are publicly available as posted on the Electronic Data Gathering, Analysis and Retrieval system (EDGAR), or (ii) on which Borrower or any of its Subsidiaries posts such documents, or provides a link thereto, on Borrower's or any of its Subsidiaries' website on the internet at Borrower's or any of its Subsidiaries' website address;

(f) Security Holder and Subordinated Debt Holder Reports. Within ten (10) days of delivery, copies of all material statements, reports and notices made available to Borrower's security holders or to any holders of Subordinated Debt (solely in their capacities as security holders or holders of Subordinated Debt and not in any other role);

(g) Beneficial Ownership Information. Prompt written notice of any material changes to the beneficial ownership information set out in Section 14 of the Perfection Certificate (or any equivalent sections of any Perfection Certificate delivered after the Effective Date). Borrower understands and acknowledges that Bank relies on such true, accurate and up-to-date beneficial ownership information to meet Bank's regulatory obligations to obtain, verify and record information about the beneficial owners of its legal entity customers;

(h) Legal Action Notice. Prompt written notice of any legal actions, investigations or proceedings pending or threatened in writing against Borrower or any of its Subsidiaries that could reasonably be expected to result in damages or costs to Borrower or any of its Subsidiaries of, individually or in the aggregate, One Million Dollars (\$1,000,000) or more;

(i) Tort Claim Notice. If Borrower shall acquire a commercial tort claim in excess of Two Hundred Fifty Thousand Dollars (\$250,000), Borrower shall promptly notify Bank in a writing signed by Borrower of the general details thereof and grant to Bank in such writing a security interest therein and in the proceeds thereof, all upon the terms of this Agreement, with such writing to be in form and substance reasonably satisfactory to Bank;

(j) Government Filings. Within five (5) Business Days after the same are sent or received, copies of all material correspondence, reports, documents and other filings by Borrower or any of its Subsidiaries with any Governmental Authority regarding compliance with or maintenance of Governmental Approvals or Applicable Law or that could reasonably be expected to have a material effect on any of the Governmental Approvals or otherwise on the business of Borrower or any of its Subsidiaries;

(k) Registered Organization. If Borrower is not a Registered Organization as of the Effective Date but later becomes one, promptly notify Bank of such occurrence and provide Bank with Borrower's organizational identification number;

(l) Default. Prompt written notice of the occurrence of a Default or Event of Default;

(m) UBS Account Statements. As soon as available, but no later than thirty (30) days after the end of each calendar quarter, copies of the monthly bank account statements for the UBS Accounts for each month in such quarterly period; provided, that following the funding of the Second Tranche, statements for such UBS Accounts shall be required monthly, within thirty (30) days after the last day of each month; and

(n) Other Information. Promptly, from time to time, such other information regarding Borrower or any of its Subsidiaries or compliance with the terms of any Loan Documents as reasonably requested by Bank.

Any submission by Borrower of a Compliance Statement or any other financial statement submitted to the Financial Statement Repository pursuant to this Section 5.3 or otherwise submitted to Bank shall be deemed to be a representation by Borrower that (i) as of the date of such Compliance Statement or other financial statement, the information and calculations set forth therein are true and correct, (ii) as of the end of the compliance period set forth in such submission, Borrower is in complete compliance with all required covenants except as noted in such Compliance Statement or other financial statement, as applicable, (iii) as of the date of such submission, no Events of Default have occurred or are continuing, (iv) all representations and warranties other than any representations or warranties that are made as of a specific date in Section 4 remain true and correct in all material respects as of the date of such submission except as noted in such Compliance Statement or other financial statement, as applicable, (v) as of the date of such submission, Borrower and each of its Subsidiaries has timely filed all required Tax returns and reports, and Borrower has timely paid all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower except as otherwise permitted pursuant to the terms of Section 4.9, and (vi) as of the date of such submission, no Liens have been levied or claims made against Borrower or any of its Subsidiaries relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Bank.

5.2 **Reserved.**

5.3 **Reserved.**

5.4 **Taxes; Pensions.**

(a) Timely file, and require each of its Subsidiaries to timely file (in each case, unless subject to a valid extension), all required Tax returns and reports and timely pay, and require each of its Subsidiaries to timely pay, all foreign, federal, state and local Taxes, assessments, deposits and contributions owed by Borrower and each of its Subsidiaries, except for deferred payment of any taxes contested pursuant to the terms of Section 4.9(a) hereof, and shall deliver to Bank, on demand, appropriate certificates attesting to such payments, and pay, and require each of its Subsidiaries to pay, all amounts necessary to fund all present pension, profit sharing and deferred compensation plans, if any, in accordance with their terms.

(b) To the extent Borrower or any of its Subsidiaries defers payment of any contested Taxes, (i) notify Bank in writing of the commencement of, and any material development in, the proceedings, and (ii) post bonds or take any other steps required to prevent the Governmental Authority levying such contested taxes from obtaining a Lien upon any of the Collateral that is other than a "Permitted Lien."

**1.1 Access to Collateral; Books and Records.** At reasonable times, on three (3) Business Days' notice (provided no notice is required if an Event of Default has occurred and is continuing), Bank, or its agents, shall have the right to inspect the Collateral and the right to audit and copy Borrower's Books. Such inspections and audits shall be conducted no more often than once every twelve (12) months, unless an Event of Default has occurred and is continuing, in which case such inspections and audits shall occur as often as Bank shall determine is necessary. The foregoing inspections and audits shall be conducted at Borrower's expense and the charge therefor shall be One Thousand Dollars (\$1,000) per person per day (or such higher amount as shall represent Bank's then-current standard charge for the same), plus out-of-pocket expenses. In the event Borrower and Bank schedule an audit more than eight

(8) days in advance, and Borrower cancels or reschedules the audit with less than eight (8) days written notice to Bank, then (without limiting any of Bank's rights or remedies) Borrower shall pay Bank a fee of Two Thousand Dollars (\$2,000) plus any out-of-pocket expenses incurred by Bank to compensate Bank for the anticipated costs and expenses of the cancellation or rescheduling.

**1.2 Insurance.**

(a) Keep its business and the Collateral insured for risks and in amounts standard for companies in Borrower's industry, size and location and as Bank may reasonably request. Insurance policies shall be in a form, with financially sound and reputable insurance companies that are not Affiliates of Borrower, and in amounts that are satisfactory to Bank, in its reasonable discretion.

(b) All property policies shall have a lender's loss payable endorsement showing Bank as lender loss payee. All liability policies shall show, or have endorsements showing, Bank as an additional insured. Bank shall be named as lender loss payee and/or additional insured with respect to any such insurance providing coverage in respect of any Collateral.

(c) Ensure that proceeds payable under any property policy are, at Bank's option, payable to Bank on account of the Obligations.

(d) At Bank's request, Borrower shall deliver certified copies of insurance policies and evidence of all premium payments. Each provider of any such insurance required under this Section 5.8 shall agree, by endorsement upon the policy or policies issued by it or by independent instruments furnished to Bank, that it will give Bank thirty (30) days prior written notice before any such policy or policies shall be canceled or altered in any material respect. If Borrower fails to obtain insurance as required under this Section 5.8 or to pay any amount or furnish any required proof of payment to third persons and Bank, Bank may make all or part of such payment or obtain such insurance policies required in this Section 5.8, and take any action under the policies Bank deems prudent.

**1.3 Accounts.**

(a) Maintain all of Borrower's, any of its Subsidiaries', and any Guarantor's operating accounts, depository accounts and excess cash with Bank or Bank's Affiliates; provided that Borrower shall be permitted to maintain the UBS Accounts so long as such UBS Accounts are subject to a Control Agreement at all times pursuant to Section 5.9(c).

(b) In addition to the foregoing, Borrower, any Subsidiary of Borrower and any Guarantor, shall obtain any business credit card, letters of credit, merchant processing and cash management services exclusively from Bank.

(c) In addition to and without limiting the restrictions in (a), Borrower shall provide Bank five (5) days prior written notice before establishing any Collateral Account at or with any bank or financial institution other than Bank or Bank's Affiliates. For each Collateral Account that Borrower at any time maintains, Borrower shall cause the applicable bank or financial institution (other than Bank) at or with which any Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument with respect to such Collateral Account to perfect Bank's Lien in such Collateral Account in accordance with the terms hereunder which Control Agreement may not be terminated without the prior written consent of Bank. The provisions of the previous sentence shall not apply to Excluded Accounts identified to Bank by Borrower as such.

**1.4 Reserved.**

**1.5 Protection of Intellectual Property Rights.**

(a) (i) Use commercially reasonable efforts to protect, defend and maintain the validity and enforceability of Borrower's and each Subsidiary's Intellectual Property material to Borrower's business, except to the extent that such failure to do so would not reasonably be expected to have a material adverse effect on Borrower's business or operations; (ii) promptly advise Bank in writing of infringements of which Borrower becomes aware or any other event that could reasonably be expected to materially and adversely affect the value Borrower's and each Subsidiary's Intellectual Property; and (iii) not allow any Intellectual Property owned by Borrower and material to Borrower's or any Subsidiary's business to be abandoned, forfeited or dedicated to the public without Bank's written consent, such consent not to be unreasonably withheld or delayed.

(b) Provide written notice to Bank within thirty (30) days of entering or becoming bound by any Restricted License (other than over-the-counter software that is commercially available to the public). Borrower shall take such steps as Bank requests in its commercially reasonable discretion to obtain the consent of, or waiver by, any person whose consent or waiver is necessary for (i) any such Restricted License to be deemed "Collateral" and for Bank to have a security interest in it that might otherwise be restricted or prohibited by law or by the terms of any such Restricted License, whether now existing or entered into in the future, and (ii) Bank to have the ability in the event of a liquidation of any Collateral to dispose of such Collateral in accordance with Bank's rights and remedies under this Agreement and the other Loan Documents.

**1.6 Litigation Cooperation.** From the date hereof and continuing through the termination of this Agreement, make available to Bank, without expense to Bank, during normal business hours, Borrower and its officers, employees and agents and Borrower's books and records, to the extent that Bank may deem them reasonably necessary to prosecute or defend any third-party suit or proceeding instituted by or against Bank with respect to any Collateral or relating to Borrower.

**1.7 Reserved.**

**1.8 Formation or Acquisition of Subsidiaries.** Notwithstanding and without limiting the negative covenants contained in Sections 6.3 and 6.7 hereof, at the time that Borrower or any Guarantor forms any Subsidiary or acquires any Subsidiary after the Effective Date (including, without limitation, pursuant to a Division), Borrower and such Guarantor shall (a) cause such new Subsidiary to provide to Bank a joinder to this Agreement to become a co-borrower hereunder or a guaranty to become a Guarantor hereunder (as determined by Bank in its commercially reasonable discretion), together with documentation, all in form and substance satisfactory to Bank in its commercially reasonable discretion (including being sufficient to grant Bank a first priority Lien (subject to Permitted Liens) in and to the assets of such newly formed or acquired Subsidiary), (b) provide to Bank appropriate certificates and powers

and financing statements, pledging all of the direct or beneficial ownership interest in such new Subsidiary, in form and substance satisfactory to Bank; and (c) provide to Bank all other documentation in form and substance satisfactory to Bank, in its commercially reasonable discretion, including one or more opinions of counsel satisfactory to Bank, in its commercially reasonable discretion, which in its opinion is appropriate with respect to the execution and delivery of the applicable documentation referred to above. Any document, agreement, or instrument executed or issued pursuant to this Section 5.14 shall be a Loan Document.

**1.9 Inventory; Returns.** Keep all Inventory in good and marketable condition, free from material defects. Returns and allowances between Borrower and its Account Debtors shall follow Borrower's customary practices as they exist at the Effective Date. Borrower shall promptly notify Bank of all returns, recoveries, disputes and claims that involve more than Two Hundred Fifty Thousand Dollars (\$250,000).

**1.10 Further Assurances.** Execute any further instruments and take such further action as Bank reasonably requests to perfect, protect, ensure the priority of or continue Bank's Lien on the Collateral or to effect the purposes of this Agreement.

**1.11 Sanctions.** (a) Not, and not permit any of its Subsidiaries to, engage in any of the activities described in Section 4.11 in the future; (b) not, and not permit any of its Subsidiaries to, become a Sanctioned Person; (a) ensure that the proceeds of the Obligations are not used to violate any Sanctions; and (d) deliver to Bank any certification or other evidence requested from time to time by Bank in its sole discretion, confirming each such Person's compliance with this Section 5.17. In addition, have implemented, and will consistently apply while this Agreement is in effect, procedures to ensure that the representations and warranties in Section 4.11 remain true and correct while this Agreement is in effect.

## **2 NEGATIVE COVENANTS**

Borrower shall not do any of the following without Bank's prior written consent:

**2.1 Dispositions.** Convey, sell, lease, transfer, assign, or otherwise dispose of (including, without limitation, pursuant to a Division) (collectively, "**Transfer**"), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, except for Transfers (a) of Inventory in the ordinary course of business; (b) of worn-out or obsolete Equipment that is, in the reasonable judgment of Borrower, no longer economically practicable to maintain or useful in the ordinary course of business of Borrower; (c) consisting of Permitted Liens and Permitted Investments; (d) consisting of the sale or issuance of any stock, partnership, membership, or other ownership interest or other equity securities of Borrower permitted under Section 6.2 of this Agreement; (e) consisting of Borrower's or its Subsidiaries' use or transfer of money or Cash Equivalents in a manner that is not prohibited by the terms of this Agreement or the other Loan Documents; and (f) consisting of non-exclusive licenses, sublicenses or similar agreements or arrangements related to the use of the property, including Intellectual Property, of Borrower or its Subsidiaries in the ordinary course of business and licenses of Intellectual Property that could not result in a legal transfer of title of the licensed property; and (g) other Transfers of non-material property with an aggregate value (for all such Transfers together) not to exceed One Hundred Thousand Dollars (\$100,000) in any fiscal year.

**2.2 Changes in Business, Management, Control, or Business Locations.** (a) Engage in or permit any of its Subsidiaries to engage in any business other than the businesses currently engaged in by Borrower and such Subsidiary, as applicable, or reasonably related thereto; (b) liquidate or dissolve or permit any of its Subsidiaries to liquidate or dissolve; (c) fail to provide notice to Bank of any Key Person departing from or ceasing to be employed by Borrower within five (5) Business Days after such Key Person's departure from Borrower; (d) permit, allow or suffer to occur any Change in Control; or (e) without at least thirty (30) days prior written notice to Bank, (i) add any new offices or business locations, including warehouses (unless such new offices or business locations contain less than Seven Hundred Fifty Thousand Dollars (\$750,000) in Borrower's assets or property) or deliver any portion of the Collateral valued, individually or in the aggregate, in excess of Five Hundred Thousand Dollars (\$500,000) to a bailee at a location other than to a bailee and at a location already disclosed in the Perfection Certificate, (ii) change its jurisdiction of organization, (iii) change its organizational structure or type, (iv) change its legal name, or (v) change any organizational number (if any) assigned by its jurisdiction of organization. If Borrower intends to add any new offices or business locations, including warehouses, containing in excess of Seven Hundred Fifty Thousand Dollars (\$750,000) of Borrower's assets or property, then Borrower will use commercially reasonable efforts to cause the

landlord of any such new offices or business locations, including warehouses, to execute and deliver a landlord consent in form and substance satisfactory to Bank. If Borrower intends to deliver any portion of the Collateral valued, individually or in the aggregate, in excess of Seven Hundred Fifty Thousand Dollars (\$750,000) to a bailee, and Bank and such bailee are not already parties to a bailee agreement governing both the Collateral and the location to which Borrower intends to deliver the Collateral, then Borrower will use commercially reasonable efforts to cause such bailee to execute and deliver a bailee agreement in form and substance reasonably satisfactory to Bank.

**2.3 Mergers or Acquisitions.** Merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with any other Person, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the stock, partnership, membership, or other ownership interest or other equity securities or property of another Person (including, without limitation, by the formation of any Subsidiary or pursuant to a Division), except to the extent constituting a Permitted Acquisition. A Subsidiary that is not a co-borrower hereunder may merge or consolidate into another Subsidiary or into Borrower (with Borrower as the surviving entity).

**2.4 Indebtedness.** Create, incur, assume, or be liable for any Indebtedness, or permit any Subsidiary to do so, other than Permitted Indebtedness.

**2.5 Encumbrance.** Create, incur, allow, or suffer to exist any Lien on any of its property, or assign or convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for Permitted Liens, permit any Collateral not to be subject to the first priority security interest granted herein, or enter into any agreement, document, instrument or other arrangement (except with or in favor of Bank) with any Person which directly or indirectly prohibits or has the effect of prohibiting Borrower or any Subsidiary from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of Borrower's or any Subsidiary's Intellectual Property, except (i) as is otherwise permitted in Section 6.1 hereof and the definition of "Permitted Liens" herein or (ii) for customary restrictions on assignment, transfer and encumbrances in license agreements under which Borrower or any Subsidiary is the licensee.

**2.6 Maintenance of Collateral Accounts.** Maintain any Collateral Account except pursuant to the terms of Section 5.9(c).

**2.7 Distributions; Investments.** (a) Pay any dividends or make any distribution or payment or redeem, retire or purchase any stock, partnership, membership, or other ownership interest or other equity securities, provided that Borrower may (i) repurchase the stock, partnership, membership, or other ownership interest or other equity securities of former employees or consultants pursuant to stock repurchase agreements so long as an Event of Default does not exist at the time of any such repurchase and would not exist after giving effect to any such repurchase, provided that the aggregate amount of all such repurchases does not exceed One Million Dollars (\$1,000,000) in any twelve-month period and (ii) pay reasonable and customary travel and business expense reimbursements or similar payments to its directors in the ordinary course of business; or (b) directly or indirectly make any Investment (including, without limitation, by the formation of any Subsidiary) other than Permitted Investments, or permit any of its Subsidiaries to do so.

**2.8 Transactions with Affiliates.** Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Borrower, except for (a) transactions that are in the ordinary course of Borrower's business, upon fair and reasonable terms that are no less favorable to Borrower than would be obtained in an arm's length transaction with a non-affiliated Person, (b) transactions constituting bona fide financing rounds for capital raising purposes, provided such financing transactions are approved by the Board and are not otherwise prohibited by this Agreement, (c) transaction of the type permitted pursuant to the terms of Section 6.7 and 6.9 hereof, and (d) equity issuances approved by the Board pursuant to Board-approved equity incentive plans to the extent not prohibited by Section 6.2.

**2.9 Subordinated Debt.** Except as expressly permitted under the terms of the subordination, intercreditor, or other similar agreement to which any Subordinated Debt is subject: (a) make or permit any payment on such Subordinated Debt; or (b) amend any provision in any document relating to such Subordinated Debt that would increase the amount thereof, provide for earlier or greater principal, interest, or other payments thereon, or adversely affect the subordination thereof to Obligations owed to Bank.

**2.10 Compliance.** (a) Become an “investment company” or a company controlled by an “investment company”, under the Investment Company Act of 1940, as amended, or undertake as one of its important activities extending credit to purchase or carry margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of any Credit Extension for that purpose; (b)(i) fail to meet the minimum funding requirements of ERISA, (ii) permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur, (iii) fail to comply with the Federal Fair Labor Standards Act or (iv) violate any other law or regulation, if the foregoing subclauses (i) through (iv), individually or in the aggregate, could reasonably be expected to have a material adverse effect on Borrower’s business or operations, or permit any of its Subsidiaries to do so; or (c) withdraw or permit any Subsidiary to withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any present pension, profit sharing and deferred compensation plan which could reasonably be expected to result in any liability of Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other Governmental Authority.

### **3 EVENTS OF DEFAULT**

Any one of the following shall constitute an event of default (an “**Event of Default**”) under this Agreement:

**3.1 Payment Default.** Borrower fails to (a) make any payment of principal or interest on any Credit Extension on its due date, or (b) pay any other Obligations within three (3) Business Days after such Obligations are due and payable (which three (3) Business Day cure period shall not apply to payments due on the Term Loan Maturity Date). During the cure period, the failure to make or pay any payment specified under clause (b) hereunder is not an Event of Default (but no Credit Extension will be made during the cure period);

#### **3.2 Covenant Default.**

(a) Borrower fails or neglects to perform any obligation in Section 2.4, Section 5 (other than Sections 5.2 (Government Compliance), 5.12 (Litigation Cooperation), 5.15 (Inventory; Returns) and 5.16 (Further Assurances)) or violates any covenant in Section 6; or

(b) Borrower fails or neglects to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any Loan Documents, and as to any default (other than those specified in this Section 7) under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure the default within ten (10) days after the occurrence thereof; provided, however, that if the default cannot by its nature be cured within the ten (10) day period or cannot after diligent attempts by Borrower be cured within such ten (10) day period, and such default is likely to be cured within a reasonable time, then Borrower shall have an additional period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, and within such reasonable time period the failure to cure the default shall not be deemed an Event of Default (but no Credit Extensions shall be made during such cure period). Cure periods provided under this section shall not apply, among other things, to financial covenants, if any, or any other covenants that are required to be satisfied, completed or tested by a date certain or any covenants set forth in clause (a) above;

**3.3 Material Adverse Change.** A Material Adverse Change occurs;

#### **3.4 Attachment; Levy; Restraint on Business.**

(a) (i) The service of process seeking to attach, by trustee or similar process, any funds of Borrower or any Subsidiary in excess of Fifty Thousand Dollars (\$50,000), or (ii) a notice of lien or levy is filed against any of Borrower’s or any of its Subsidiaries’ assets by any Governmental Authority, and the same under subclauses (i) and (ii) hereof are not, within ten (10) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); provided, however, no Credit Extensions shall be made during any ten

(10) day cure period; or

(b) (i) any material portion of Borrower’s or any of its Subsidiaries’ assets is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents Borrower or any of its Subsidiaries from conducting all or any material part of its business;

**3.5 Insolvency.** (a) Borrower or any of its Subsidiaries is unable to pay its debts (including trade debts) as they become due or otherwise becomes insolvent; (b) Borrower or any of its Subsidiaries begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against Borrower or any of its Subsidiaries and is not dismissed or stayed within forty-five (45) days (but no Credit Extensions shall be made while any of the conditions described in clause (a) exist or until any Insolvency Proceeding is dismissed);

**3.6 Other Agreements.** There is, under any agreement to which Borrower, any of Borrower's Subsidiaries, or any Guarantor is a party with a third party or parties, (a) any default resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount individually or in the aggregate in excess of Five Hundred Thousand Dollars (\$500,000); or (b) any breach or default by Borrower, any of Borrower's Subsidiaries, or Guarantor, the result of which could have a material adverse effect on Borrower's, any of Borrower's Subsidiaries', or any Guarantor's business or operations;

**3.7 Judgments; Penalties.** One or more fines, penalties or final judgments, orders or decrees for the payment of money in an amount, individually or in the aggregate, of at least One Million Dollars (\$1,000,000) (not covered by independent third-party insurance as to which liability has been accepted by such insurance carrier) shall be rendered against Borrower or any of its Subsidiaries by any Governmental Authority, and the same are not, within ten (10) days after the entry, assessment or issuance thereof, discharged, or after execution thereof, or stayed pending appeal, or such judgments are not discharged prior to the expiration of any such stay (provided that no Credit Extensions will be made prior to the discharge, or stay of such fine, penalty, judgment, order or decree);

**3.8 Misrepresentations.** Borrower or any of its Subsidiaries or any Person acting for Borrower or any of its Subsidiaries makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing delivered to Bank or to induce Bank to enter this Agreement or any Loan Document, and such representation, warranty, or other statement is incorrect in any material respect when made (it being agreed and acknowledged by Bank that the projections and forecasts provided by Borrower or any of its Subsidiaries in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results);

**3.9 Subordinated Debt.** If: (a) any document, instrument, or agreement evidencing any Subordinated Debt shall for any reason be revoked or invalidated or otherwise cease to be in full force and effect, or any Person (other than Bank) shall be in breach thereof or contest in any manner the validity or enforceability thereof or deny that it has any further liability or obligation thereunder; (b) a default or event of default (however defined) has occurred under any document, instrument, or agreement evidencing any Subordinated Debt, which default shall not have been cured or waived within any applicable grace period; or (c) the Obligations shall for any reason be subordinated or shall not have the priority contemplated by this Agreement or any applicable subordination or intercreditor agreement;

**3.10 Lien Priority.** There is a material impairment in the perfection or priority of Bank's security interest in the Collateral;

**3.11 Guaranty.** (a) Any guaranty of any Obligations terminates or ceases for any reason to be in full force and effect; (b) any Guarantor does not perform any obligation or covenant under any guaranty of the Obligations; (c) any circumstance described in Sections 7.3, 7.4, 7.5, 7.6, 7.7 or 7.8 of this Agreement occurs with respect to any Guarantor, (d) the death, liquidation, winding up, or termination of existence of any Guarantor; or (e)(i) a material impairment in the perfection or priority of Bank's Lien in the collateral provided by Guarantor or in the value of such collateral or (ii) a material adverse change in the general affairs, management, results of operation, condition (financial or otherwise) or the prospect of repayment of the Obligations occurs with respect to any Guarantor; or

**3.12 Governmental Approvals.** Any Governmental Approval shall have been (a) revoked, rescinded, suspended, modified in an adverse manner or not renewed in the ordinary course for a full term or (b) subject to any decision by a Governmental Authority that designates a hearing with respect to any applications for renewal of any of such Governmental Approval or that could result in the Governmental Authority taking any of the actions described in clause (a) above, and such decision or such revocation, rescission, suspension, modification or non-renewal (i) causes, or could reasonably be expected to cause, a Material Adverse Change, or (ii) materially and adversely affects the legal qualifications of Borrower or any of its Subsidiaries to hold such Governmental Approval in any applicable jurisdiction and such revocation, rescission, suspension, modification or non-renewal could reasonably be expected to

materially and adversely affect the status of or legal qualifications of Borrower or any of its Subsidiaries to hold any Governmental Approval in any other jurisdiction.

#### **4 BANK'S RIGHTS AND REMEDIES**

**4.1 Rights and Remedies.** Upon the occurrence and during the continuance of an Event of Default, Bank may, without notice or demand, do any or all of the following:

(a) declare all Obligations immediately due and payable (but if an Event of Default described in Section 7.5 occurs all Obligations are immediately due and payable without any action by Bank);

(b) stop advancing money or extending credit for Borrower's benefit under this Agreement or under any other agreement between Borrower and Bank;

(c) for any Letters of Credit, demand that Borrower (i) deposit cash with Bank in an amount equal to at least (A) one hundred five percent (105%) of the aggregate face amount of any Letters of Credit denominated in Dollars remaining undrawn, and (B) one hundred fifteen percent (115%) of the Dollar Equivalent of the aggregate face amount of any Letters of Credit denominated in a Foreign Currency remaining undrawn (plus, in each case, all interest, fees, and costs due or estimated by Bank, in its commercially reasonable discretion, to become due in connection therewith), to secure all of the Obligations relating to such Letters of Credit, as collateral security for the repayment of any future drawings under such Letters of Credit, and Borrower shall forthwith deposit and pay such amounts, and (ii) pay in advance all letter of credit fees scheduled to be paid or payable over the remaining term of any Letters of Credit;

(d) terminate any FX Contracts (it being understood and agreed that (i) Bank is not obligated to deliver the currency which Borrower has contracted to receive under any FX Contract, and Bank may cover its exposure for any FX Contracts by purchasing or selling currency in the interbank market as Bank deems appropriate;

(v) Borrower shall be liable for all losses, damages, costs, margin obligations and expenses incurred by Bank arising from Borrower's failure to satisfy its obligations under any FX Contract or the execution of any FX Contract; and (iii) Bank shall not be liable to Borrower for any gain in value of a FX Contract that Bank may obtain in covering Borrower's breach);

(a) verify the amount of, demand payment of and performance under, and collect any Accounts and General Intangibles, settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that Bank considers advisable, and notify any Person owing Borrower money of Bank's security interest in such funds;

(b) make any payments and do any acts it considers necessary or reasonable to protect the Collateral and/or its security interest in the Collateral. Borrower shall assemble the Collateral if Bank requests and make it available as Bank designates. Bank may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Borrower grants Bank a license to enter and occupy any of its premises, without charge, to exercise any of Bank's rights or remedies;

(c) apply to the Obligations any (i) balances and deposits of Borrower it holds, or (ii) amount held by Bank owing to or for the credit or the account of Borrower;

(d) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral. For use solely upon the occurrence and during the continuation of an Event of Default and solely to the extent necessary to exercise its rights under the Collateral, Bank is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, Borrower's labels, Patents, Copyrights, mask works, rights of use of any name, trade secrets, trade names, Trademarks, and advertising matter, or any similar property solely as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Bank's exercise of its rights under this Section 8.1, Borrower's rights under all licenses and all franchise agreements inure to Bank's benefit;

(e) place a “hold” on any account maintained with Bank and/or deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Control Agreement or similar agreements providing control of any Collateral;

(f) demand and receive possession of Borrower’s Books; and

(g) exercise all rights and remedies available to Bank under the Loan Documents or at law or equity, including all remedies provided under the Code or any Applicable Law (including disposal of the Collateral pursuant to the terms thereof).

**5.2 Power of Attorney.** Borrower hereby irrevocably appoints Bank as its true and lawful attorney-in- fact, (a) exercisable solely upon the occurrence and during the continuance of an Event of Default, to: (i) endorse Borrower’s name on any checks, payment instruments, or other forms of payment or security; (ii) sign Borrower’s name on any invoice or bill of lading for any Account or drafts against Account Debtors; (iii) demand, collect, sue, and give releases to any Account Debtor for monies due, settle and adjust disputes and claims about the Accounts directly with Account Debtors, and compromise, prosecute, or defend any action, claim, case, or proceeding about any Collateral (including filing a claim or voting a claim in any bankruptcy case in Bank’s or Borrower’s name, as Bank chooses); (iv) make, settle, and adjust all claims under Borrower’s insurance policies; (v) pay, contest or settle any Lien, charge, encumbrance, security interest, or other claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; (vi) transfer the Collateral into the name of Bank or a third party as the Code permits; and (vii) receive, open and dispose of mail addressed to Borrower; and (b) regardless of whether an Event of Default has occurred, to sign Borrower’s name on any documents necessary to perfect or continue the perfection of Bank’s security interest in the Collateral. Bank’s foregoing appointment as Borrower’s attorney in fact, and all of Bank’s rights and powers, coupled with an interest, are irrevocable until such time as all Obligations (other than inchoate indemnity obligations) have been satisfied in full, Bank is under no further obligation to make Credit Extensions and the Loan Documents have been terminated. Bank shall not incur any liability in connection with or arising from the exercise of such power of attorney and shall have no obligation to exercise any of the foregoing rights and remedies.

**5.3 Protective Payments.** If Borrower fails to obtain the insurance called for by Section 5.8 or fails to pay any premium thereon or fails to pay any other amount which Borrower is obligated to pay under this Agreement or any other Loan Document or which may be required to preserve the Collateral, Bank may obtain such insurance or make such payment, and all amounts so paid by Bank are Bank Expenses and immediately due and payable, bearing interest at the then highest rate applicable to the Obligations, and secured by the Collateral. Bank will make reasonable efforts to provide Borrower with notice of Bank obtaining such insurance at the time it is obtained or within a reasonable time thereafter. No payments by Bank are deemed an agreement to make similar payments in the future or Bank’s waiver of any Event of Default.

**5.4 Application of Payments and Proceeds Upon Default.** If an Event of Default has occurred and is continuing, Bank may apply any funds in its possession, whether from Borrower account balances, payments, proceeds realized as the result of any collection of Accounts or other disposition of the Collateral, or otherwise, to the Obligations in such order as Bank shall determine in its sole discretion. Any surplus shall be paid to Borrower or other Persons legally entitled thereto; Borrower shall remain liable to Bank for any deficiency. If Bank, in its commercially reasonable discretion, directly or indirectly, enters into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, Bank shall have the option, exercisable at any time, of either reducing the Obligations by the principal amount of the purchase price or deferring the reduction of the Obligations until the actual receipt by Bank of cash therefor.

**5.5 Bank’s Liability for Collateral.** Bank’s sole duty with respect to the custody, safekeeping and physical preservation of the Collateral in its possession or under its control, under Section 9-207 of the Code or otherwise, shall be to deal with it in the same manner as Bank deals with its own property consisting of similar instruments or interests. Subject to the foregoing sentence, Borrower bears all risk of loss, damage or destruction of the Collateral.

**5.6 No Waiver; Remedies Cumulative.** Bank’s failure, at any time or times, to require strict performance by Borrower of any provision of this Agreement or any other Loan Document shall not waive, affect, or

diminish any right of Bank thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by the party granting the waiver and then is only effective for the specific instance and purpose for which it is given. Bank's rights and remedies under this Agreement and the other Loan Documents are cumulative. Bank has all rights and remedies provided under the Code, by law, or in equity. Bank's exercise of one right or remedy is not an election and shall not preclude Bank from exercising any other remedy under this Agreement or other remedy available at law or in equity, and Bank's waiver of any Event of Default is not a continuing waiver. Bank's delay in exercising any remedy is not a waiver, election, or acquiescence.

**5.7 Demand Waiver.** Borrower waives demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by Bank on which Borrower is liable.

## **6 NOTICES**

All notices, consents, requests, approvals, demands, or other communication by any party to this Agreement or any other Loan Document must be in writing and shall be deemed to have been validly served, given, or delivered:

(a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by electronic mail; (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address or email address indicated below; provided that, for clause (b), if such notice, consent, request, approval, demand or other communication is not sent during the normal business hours of the recipient, it shall be deemed to have been sent at the opening of business on the next Business Day of the recipient. Bank or Borrower may change its mailing or electronic mail address by giving the other party written notice thereof in accordance with the terms of this Section 9.

If to Borrower: SINGULAR GENOMICS SYSTEMS, INC.  
10931 N. Torrey Pines Road La  
Jolla, CA 92037  
Attn: Drew Spaventa, CEO  
Email: drew@singulargenomics.com

With a copy to, which shall not constitute notice to the Borrower:

Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP c/o Ryan  
Gunderson  
3570 Carmel Mountain Road Suite  
200  
San Diego, CA 92130  
Email: ryangunderson@gunder.com

If to Bank: Silicon Valley Bank  
4370 La Jolla Village Drive, Suite 1050 San  
Diego, CA 92122  
Attn: Oliver Gregory  
Email: SWLSReporting@svb.com

## **2 CHOICE OF LAW, VENUE AND JURY TRIAL WAIVER; JUDICIAL REFERENCE**

Except as otherwise expressly provided in any of the Loan Documents, California law governs the Loan Documents without regard to principles of conflicts of law that would require the application of the laws of another jurisdiction. Borrower and Bank each irrevocably and unconditionally submit to the exclusive jurisdiction of the State and Federal courts in California; provided, however, that nothing in this Agreement shall be deemed to operate to preclude Bank from bringing suit or taking other legal action in any other jurisdiction with respect to the Loan Documents or to realize on the Collateral or any other security for the Obligations, or to enforce a judgment or other

court order in favor of Bank. Borrower expressly, irrevocably and unconditionally submits and consents in advance to such jurisdiction in any action or suit commenced in any such court, and Borrower hereby irrevocably and unconditionally waives, to the fullest extent permitted by Applicable Law, any objection that it may have based upon lack of personal jurisdiction, improper venue, or forum non conveniens and hereby irrevocably and unconditionally consents to the granting of such legal or equitable relief as is deemed appropriate by such court. Borrower hereby waives personal service of the summons, complaints, and other process issued in such action or suit and agrees that service of such summons, complaints, and other process may be made by registered or certified mail addressed to Borrower at the address set forth in, or subsequently provided by Borrower in accordance with, Section 9 of this Agreement and that service so made shall be deemed completed upon the earlier to occur of Borrower's actual receipt thereof or three (3) days after deposit in the U.S. mails, proper postage prepaid.

**TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, BORROWER AND BANK EACH WAIVES ITS RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE LOAN DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR THE PARTIES HERETO TO ENTER INTO THIS AGREEMENT. EACH PARTY HERETO HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.**

WITHOUT INTENDING IN ANY WAY TO LIMIT THE PARTIES' AGREEMENT TO WAIVE THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY, if the above waiver of the right to a trial by jury is not enforceable, the parties hereto agree that any and all disputes or controversies of any nature between them arising at any time shall be decided by a reference to a private judge, mutually selected by the parties (or, if they cannot agree, by the Presiding Judge of the Santa Clara County, California Superior Court) appointed in accordance with California Code of Civil Procedure Section 638 (or pursuant to comparable provisions of federal law if the dispute falls within the exclusive jurisdiction of the federal courts), sitting without a jury, in Santa Clara County, California; and the parties hereby submit to the jurisdiction of such court. The reference proceedings shall be conducted pursuant to and in accordance with the provisions of California Code of Civil Procedure Sections 638 through 645.1, inclusive. The private judge shall have the power, among others, to grant provisional relief, including without limitation, entering temporary restraining orders, issuing preliminary and permanent injunctions and appointing receivers. All such proceedings shall be closed to the public and confidential and all records relating thereto shall be permanently sealed. If during the course of any dispute, a party desires to seek provisional relief, but a judge has not been appointed at that point pursuant to the judicial reference procedures, then such party may apply to the Santa Clara County, California Superior Court for such relief. The proceeding before the private judge shall be conducted in the same manner as it would be before a court under the rules of evidence applicable to judicial proceedings. The parties shall be entitled to discovery which shall be conducted in the same manner as it would be before a court under the rules of discovery applicable to judicial proceedings. The private judge shall oversee discovery and may enforce all discovery rules and orders applicable to judicial proceedings in the same manner as a trial court judge. The parties agree that the selected or appointed private judge shall have the power to decide all issues in the action or proceeding, whether of fact or of law, and shall report a statement of decision thereon pursuant to California Code of Civil Procedure Section 644(a). Nothing in this paragraph shall limit the right of any party at any time to exercise self-help remedies, foreclose against collateral, or obtain provisional remedies. The private judge shall also determine all issues relating to the applicability, interpretation, and enforceability of this paragraph.

This Section 10 shall survive the termination of this Agreement and the repayment of all Obligations.

### **3 GENERAL PROVISIONS**

**3.1 Termination Prior to Maturity Date; Survival.** All covenants, representations and warranties made in this Agreement shall continue in full force until this Agreement has terminated pursuant to its terms and all Obligations (other than inchoate indemnity obligations) have been satisfied. So long as Borrower has satisfied the Obligations (other than inchoate indemnity obligations, and any other obligations which, by their terms, are to survive the termination of this Agreement and the repayment of all Obligations, and any Obligations under Bank Services Agreements that are cash collateralized in accordance with Section 3.1 of this Agreement), this Agreement may be terminated prior to the Term Loan Maturity Date by Borrower in accordance with Section 1.2(c) of this Agreement. Those obligations that are expressly specified in this Agreement as surviving this Agreement's termination and the

repayment of all Obligations shall continue to survive notwithstanding this Agreement's termination and the repayment of all Obligations.

**3.2 Successors and Assigns.** This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Borrower may not assign or transfer this Agreement or any rights or obligations under it without Bank's prior written consent (which may be granted or withheld in Bank's sole discretion) and any other attempted assignment or transfer by Borrower shall be null and void. Bank has the right, without the consent of or notice to Borrower, to sell, transfer, assign, negotiate, or grant participation in all or any part of, or any interest in, Bank's obligations, rights, and benefits under this Agreement and the other Loan Documents.

**3.3 Indemnification.**

(a) General Indemnification. Borrower shall indemnify, defend and hold Bank and its Affiliates and the partners, directors, officers, employees, agents, trustees, administrators, managers, advisors and representatives of Bank and its Affiliates (each, an "**Indemnified Person**") harmless against: (i) all losses, claims, damages, liabilities and related expenses (including Bank Expenses and the reasonable fees, charges and disbursements of any counsel for any Indemnified Person) (collectively, "**Claims**") arising out of, in connection with, or as a result of (i) the execution or delivery of this Agreement, any other Loan Document or any agreement or instrument contemplated hereby or thereby, the performance by the parties hereto of their respective obligations hereunder or thereunder or the consummation of the transactions contemplated hereby or thereby, (ii) any Credit Extension or the use or proposed use of the proceeds therefrom, (iii) any actual or alleged presence or release of hazardous materials on or from any property owned or operated by Borrower or any of its Subsidiaries, or any environmental liability related in any way to Borrower or any of its Subsidiaries, or (iv) any actual or prospective claim, litigation, investigation or proceeding relating to any of the foregoing, whether based on contract, tort or any other theory, whether brought by a third party or by Borrower, and regardless of whether any Indemnified Person is a party thereto; provided that such indemnity shall not, as to any Indemnified Person, be available to the extent that such losses, claims, damages, liabilities or related expenses are determined by a court of competent jurisdiction by final and non-appealable judgment to have resulted from the gross negligence or willful misconduct of such Indemnified Person. All amounts due under this Section 11.3 shall be payable promptly after demand therefor.

(b) Waiver of Consequential Damages, Etc. To the fullest extent permitted by Applicable Law, Borrower shall not assert, and hereby waives, any claim against any Indemnified Person, on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) or any loss of profits arising out of, in connection with, or as a result of, this Agreement, any other Loan Document or any agreement or instrument contemplated hereby, the transactions contemplated hereby or thereby, any Credit Extension, or the use of the proceeds thereof. No Indemnified Person shall be liable for any damages arising from the use by unintended recipients of any information or other materials distributed by it through telecommunications, electronic or other information transmission systems in connection with this Agreement or the other Loan Documents or the transactions contemplated hereby or thereby.

This Section 11.3 shall survive the termination of this Agreement and the repayment of all Obligations until all statutes of limitation with respect to the Claims, losses, and expenses for which indemnity is given shall have run.

**3.4 Time of Essence.** Time is of the essence for the performance of all Obligations in this Agreement.

**3.5 Severability of Provisions.** Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

**3.6 Amendments in Writing; Waiver; Integration.** No purported amendment or modification of any Loan Document, or waiver, discharge or termination of any obligation under any Loan Document, shall be effective unless, and only to the extent, expressly set forth in a writing signed by each party hereto. Without limiting the generality of the foregoing, no oral promise or statement, nor any action, inaction, delay, failure to require performance or course of conduct shall operate as, or evidence, an amendment, supplement or waiver or have any other effect on any Loan Document. Any waiver granted shall be limited to the specific circumstance expressly described in it, and shall not apply to any subsequent or other circumstance, whether similar or dissimilar, or give rise to, or evidence, any obligation or commitment to grant any further waiver. The Loan Documents represent the entire agreement about this

subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of the Loan Documents merge into the Loan Documents.

**3.7 Counterparts.** This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement. Delivery of an executed signature page of this Agreement by electronic mail transmission shall be effective as delivery of a manually executed counterpart hereof.

**3.8 Confidentiality.** Bank agrees to maintain the confidentiality of Information (as defined below), except that Information may be disclosed (a) to Bank's Subsidiaries and Affiliates and their respective employees, directors, agents, attorneys, accountants and other professional advisors (collectively, "**Representatives**" and, together with Bank, collectively, "**Bank Entities**") (provided, however, that any such Bank Entity shall be subject to provisions substantially the same as those in this Section 11.8); (b) to prospective transferees, assignees, credit providers or purchasers of Bank's interests under or in connection with this Agreement and their Representatives (provided, however, Bank shall use commercially reasonable efforts to obtain any such prospective transferee's, assignee's, credit provider's, purchaser's or their Representatives' agreement to the terms of this provision); (c) as required by law, regulation, subpoena, or other order; (d) to Bank's regulators or as otherwise required or requested in connection with Bank's examination or audit; (e) in connection with the exercise of remedies under the Loan Documents or any action or proceeding relating to this Agreement or any other Loan Document or the enforcement of rights hereunder or thereunder; and (f) to third-party service providers of Bank so long as such service providers have executed a confidentiality agreement with Bank with terms no less restrictive than those contained herein. "**Information**" means all information received from Borrower regarding Borrower or its business, in each case other than information that is either: (i) in the public domain or in Bank's possession when disclosed to Bank, or becomes part of the public domain (other than as a result of its disclosure by Bank in violation of this Agreement) after disclosure to Bank; or (ii) disclosed to Bank by a third party, if Bank does not know that the third party is prohibited from disclosing the information.

**3.9 Electronic Execution of Documents.** The words "execution," "signed," "signature" and words of like import in any Loan Document shall be deemed to include electronic signatures, including any Electronic Signature as defined in the Electronic Transactions Law (2003 Revision) of the Cayman Islands (the "**Cayman Islands Electronic Signature Law**"), if applicable, or the keeping of records in electronic form, including any Electronic Record, as defined in Cayman Islands Electronic Signature Law, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any Applicable Law, including, without limitation, any state law based on the Uniform Electronic Transactions Act or the Cayman Islands Electronic Signature Law; provided, however that sections 8 and 19(3) of the Cayman Islands Electronic Signature Law shall not apply to this Agreement or the execution or delivery thereof.

**3.10 Right of Setoff.** Borrower hereby grants to Bank a Lien and a right of setoff as security for all Obligations to Bank, whether now existing or hereafter arising upon and against all deposits, credits, collateral and property, now or hereafter in the possession, custody, safekeeping or control of Bank or any entity under the control of Bank (including a subsidiary of Bank) or in transit to any of them, and other obligations owing to Bank or any such entity. At any time after the occurrence and during the continuance of an Event of Default, without demand or notice, Bank may set off the same or any part thereof and apply the same to any liability or Obligation of Borrower even though unmatured and regardless of the adequacy of any other collateral securing the Obligations. ANY AND ALL RIGHTS TO REQUIRE BANK TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SETOFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF BORROWER, ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED.

**3.11 Captions and Section References.** The headings used in this Agreement are for convenience only and shall not affect the interpretation of this Agreement. Unless indicated otherwise, section references herein are to sections of this Agreement.

**3.12 Construction of Agreement.** The parties hereto mutually acknowledge that they and their attorneys have participated in the preparation and negotiation of this Agreement. In cases of uncertainty this Agreement shall be construed without regard to which of the parties caused the uncertainty to exist.

**3.13 Relationship.** The relationship of the parties to this Agreement is determined solely by the provisions of this Agreement. The parties do not intend to create any agency, partnership, joint venture, trust, fiduciary or other relationship with duties or incidents different from those of parties to an arm's-length contract.

**3.14 Third Parties.** Nothing in this Agreement, whether express or implied, is intended to: (a) confer any benefits, rights or remedies under or by reason of this Agreement on any Persons other than the express parties to it and their respective permitted successors and assigns; (b) relieve or discharge the obligation or liability of any Person not an express party to this Agreement; or (c) give any Person not an express party to this Agreement any right of subrogation or action against any party to this Agreement.

**3.15 Anti-Terrorism Law.** Bank hereby notifies Borrower that, pursuant to the requirements of Anti-Terrorism Law, Bank may be required to obtain, verify and record information that identifies Borrower, which information may include the name and address of Borrower and other information that will allow Bank to identify Borrower in accordance with Anti-Terrorism Law. Borrower hereby agrees to take any action necessary to enable Bank to comply with the requirements of Anti-Terrorism Law.

**3.16 No Novation.** Nothing contained herein shall in any way impair the Prior Loan Agreement and the other Loan Documents now held for the Obligations, nor affect or impair any rights, powers, or remedies under the Prior Loan Agreement or any Loan Document, it being the intent of the parties hereto that this Agreement shall not constitute a novation of the Prior Loan Agreement or an accord and satisfaction of the Obligations. Except as expressly provided for in this Agreement, the Loan Documents are hereby ratified and reaffirmed and shall remain in full force and effect. For purposes of clarification, the amendment and restatement of the Prior Loan Agreement affects only the Prior Loan Agreement and not any of the other documents or agreements entered into in connection with the Prior Loan Agreement, unless and only to the extent those documents or agreements are separately amended in connection herewith. Borrower hereby ratifies and reaffirms the validity and enforceability of all of the liens and security interests heretofore granted pursuant to the Loan Documents, as collateral security for the Obligations, and acknowledges that all of such liens and security interests, and all Collateral heretofore pledged as security for the Obligations, continues to be and remains in full force and effect as Collateral for the Obligations from and after the date of this Agreement.

## **4 ACCOUNTING TERMS AND OTHER DEFINITIONS**

### **4.1 Accounting and Other Terms.**

(a) Accounting terms not defined in this Agreement shall be construed following GAAP. Calculations and determinations must be made following GAAP (except for with respect to unaudited financial statements for the absence of footnotes and subject to year-end audit adjustments), provided that if at any time any change in GAAP would affect the computation of any financial ratio or requirement set forth in any Loan Document, and either Borrower or Bank shall so request, Borrower and Bank shall negotiate in good faith to amend such ratio or requirement to preserve the original intent thereof in light of such change in GAAP; provided, further, that, until so amended, (i) such ratio or requirement shall continue to be computed in accordance with GAAP prior to such change therein and (ii) Borrower shall provide Bank financial statements and other documents required under this Agreement or as reasonably requested hereunder setting forth a reconciliation between calculations of such ratio or requirement made before and after giving effect to such change in GAAP.

(b) As used in the Loan Documents: (i) the words "shall" or "will" are mandatory, the word "may" is permissive, the word "or" is not exclusive, the words "includes" and "including" are not limiting, the singular includes the plural, and numbers denoting amounts that are set off in brackets are negative; (ii) the term "continuing" in the context of an Event of Default means that the Event of Default has not been remedied (if capable of being remedied) or waived; and (iii) whenever a representation or warranty is made to Borrower's knowledge or awareness, to the "best of" Borrower's knowledge, or with a similar qualification, knowledge or awareness means the actual knowledge, after reasonable investigation, of any Responsible Officer.

---

**4.2 Definitions.** Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth in this Section 12.2. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the Code to the extent such terms are defined therein. As used in this Agreement, the following capitalized terms have the following meanings:

“**Account**” is, as to any Person, any “account” of such Person as “account” is defined in the Code with such additions to such term as may hereafter be made, and includes, without limitation, all accounts receivable and other sums owing to such Person.

“**Account Debtor**” is any “account debtor” as defined in the Code with such additions to such term as may hereafter be made.

“**Acquisition**” is (a) the purchase or other acquisition by Borrower or any Subsidiary of all or substantially all of the assets of any other Person, or (b) the purchase or other acquisition (whether by means of merger, consolidation, or otherwise) by Borrower or any Subsidiary of all or substantially all of the stock or other equity interest of any other Person.

“**Acquisition Price**” is defined in the definition of Permitted Acquisition.

“**Affiliate**” is, with respect to any Person, each other Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person’s senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person’s managers and members.

“**Agreement**” is defined in the preamble hereof.

“**Anti-Terrorism Law**” means any law relating to terrorism or money-laundering, including Executive Order No. 13224 and the USA Patriot Act.

“**Applicable Law**” means all applicable provisions of constitutions, laws, statutes, ordinances, rules, treaties, regulations, permits, licenses, approvals, interpretations and orders of courts or Governmental Authorities and all orders and decrees of all courts and arbitrators.

“**Authorized Signer**” means any individual listed in Borrower’s Borrowing Resolutions who is authorized to execute the Loan Documents, including making (and executing if applicable) any Credit Extension request, on behalf of Borrower.

“**Bank**” is defined in the preamble hereof. “**Bank**

**Entities**” is defined in Section 11.8.

“**Bank Expenses**” are all audit fees, costs and reasonable and documented expenses (including reasonable, out-of-pocket and documented attorneys’ fees and expenses) for preparing, amending, negotiating, administering, defending and enforcing the Loan Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred with respect to Borrower or any Guarantor.

“**Bank Services**” are any products, credit services, and/or financial accommodations previously, now, or hereafter provided to Borrower or any of its Subsidiaries by Bank or any Bank Affiliate, including, without limitation, any letters of credit, cash management services (including, without limitation, merchant services, direct deposit of payroll, business credit cards, and check cashing services), interest rate swap arrangements, and foreign exchange services as any such products or services may be identified in Bank’s various agreements related thereto (each, a “**Bank Services Agreement**”).

“**Bank Services Agreement**” is defined in the definition of Bank Services. “**Board**” is

Borrower’s board of directors or equivalent governing body.

---

“**Borrower**” is set forth on Schedule I hereto.

“**Borrower’s Books**” are all Borrower’s books and records including ledgers, federal and state tax returns, records regarding Borrower’s assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

“**Borrowing Resolutions**” are, with respect to any Person, those resolutions adopted by such Person’s board of directors (and, if required under the terms of such Person’s Operating Documents, stockholders) and delivered by such Person to Bank approving the Loan Documents to which such Person is a party and the transactions contemplated thereby, together with a certificate executed by its secretary on behalf of such Person certifying (a) such Person has the authority to execute, deliver, and perform its obligations under each of the Loan Documents to which it is a party, (e) that set forth as a part of or attached as an exhibit to such certificate is a true, correct, and complete copy of the resolutions then in full force and effect authorizing and ratifying the execution, delivery, and performance by such Person of the Loan Documents to which it is a party, (c) the name(s) of the Person(s) authorized to execute the Loan Documents, including making (and executing if applicable) any Credit Extension request, on behalf of such Person, together with a sample of the true signature(s) of such Person(s), and (d) that Bank may conclusively rely on such certificate unless and until such Person shall have delivered to Bank a further certificate canceling or amending such prior certificate.

“**Business Day**” is a day other than a Saturday, Sunday or other day on which commercial banks in the State of California are authorized or required by law to close.

“**Cash Burn**” means, calculated on a trailing three (3) month basis as of any date of determination, the sum of the average monthly (a) Net Income plus (b) amortization and depreciation expense plus (c) any other non-cash expenditure, charge or loss for such period (including, without limitation, (i) changes in fair value recognized in accordance with GAAP, (ii) non-cash interest expense, and (iii) any other non-cash items that require recognition in accordance with GAAP).

“**Cash Equivalents**” are (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than one (1) year from the date of acquisition; (a) commercial paper maturing no more than one (1) year after its creation and having the highest rating from either Standard & Poor’s Ratings Group or Moody’s Investors Service, Inc.; (c) Bank’s certificates of deposit issued maturing no more than one (1) year after issue; and (d) money market funds at least ninety-five percent (95.00%) of the assets of which constitute Cash Equivalents of the kinds described in clauses (a) through (c) of this definition.

“**Cayman Islands Electronic Signature Law**” is defined in Section 11.9.

“**Change in Control**” means (a) at any time, any “person” or “group” (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act), shall become, or obtain rights (whether by means of warrants, options or otherwise) to become, the “beneficial owner” (as defined in Rules 13(d)-3 and 13(d)-5 under the Exchange Act), directly or indirectly, of forty-nine percent (49%) or more of the ordinary voting power for the election of directors, partners, managers and members, as applicable, of Borrower (determined on a fully diluted basis) other than by the sale of Borrower’s equity securities in a public offering or to venture capital or private equity investors so long as Borrower identifies to Bank the venture capital or private equity investors at least seven (7) Business Days prior to the closing of the transaction and provides to Bank a description of the material terms of the transaction; (b) during any period of twelve (12) consecutive months, a majority of the members of the Board of Borrower cease to be composed of individuals (i) who were members of that board or equivalent governing body on the first day of such period, (ii) whose election or nomination to that board or equivalent governing body was approved by individuals referred to in clause (i) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body or (iii) whose election or nomination to that board or other equivalent governing body was approved by individuals referred to in clauses (i) and (ii) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body; or (c) at any time, Borrower shall cease to own and control, of record and beneficially, directly or indirectly, one hundred percent (100.00%) of each class of outstanding stock, partnership, membership, or other ownership interest or other equity securities of each Subsidiary of Borrower free and clear of all Liens (except Permitted Liens).

**“Change in Law”** means the occurrence, after the Effective Date, of: (a) the adoption or taking effect of any law, rule, regulation or treaty; (b) any change in Applicable Law or in the administration, interpretation, implementation or application thereof by any Governmental Authority; or (c) the making or issuance of any request, rule, guideline or directive (whether or not having the force of law) by any Governmental Authority; provided that notwithstanding anything herein to the contrary, (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (ii) all requests, rules, guidelines or directives promulgated by Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a “Change in Law”, regardless of the date enacted, adopted or issued.

**“Claims”** is defined in Section 11.3.

**“Code”** is the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the State of California; provided, that, to the extent that the Code is used to define any term herein or in any Loan Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such term contained in Article or Division 9 shall govern; provided further, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Bank’s Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the State California, the term “Code” shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

**“Collateral”** consists of all of Borrower’s right, title and interest in and to the following personal property:

(a) (i) all goods, Accounts (including health-care receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles (except as provided below), commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit accounts (other than Excluded Accounts), certificates of deposit, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), securities, securities accounts, securities entitlements and all other investment property, supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located; and (ii) all Borrower’s Books relating to the foregoing, and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds and insurance proceeds of any or all of the foregoing.

(b) Notwithstanding the foregoing, the Collateral does not include (i) Excluded Accounts and (ii) any Intellectual Property; provided, however, the Collateral shall include all Accounts and all proceeds of Intellectual Property. If a judicial authority (including a U.S. Bankruptcy Court) would hold that a security interest in the underlying Intellectual Property is necessary to have a security interest in such Accounts and such property that are proceeds of Intellectual Property, then the Collateral shall automatically, and effective as of November 19, 2019, include the Intellectual Property to the extent necessary to permit perfection of Bank’s security interest in such Accounts and such other property of Borrower that are proceeds of the Intellectual Property.

(c) Pursuant to the terms of a certain negative pledge arrangement with Bank, Borrower has agreed not to encumber any of its Intellectual Property without Bank’s prior written consent.

**“Collateral Account”** is any Deposit Account, Securities Account, or Commodity Account.

**“Commodity Account”** is any “commodity account” as defined in the Code with such additions to such term as may hereafter be made.

**“Compliance Statement”** is that certain statement in the form attached hereto as Exhibit A.

**“Connection Income Taxes”** means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

---

**“Contingent Obligation”** is, for any Person, any direct or indirect liability of that Person for (a) any direct or indirect guaranty by such Person of any indebtedness, lease, dividend, letter of credit, credit card or other obligation of another, (b) any other obligation endorsed, co-made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (c) any obligations for undrawn letters of credit for the account of that Person; and (d) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but “Contingent Obligation” does not include endorsements in the ordinary course of business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

**“Control Agreement”** is any control agreement entered into among the depository institution at which Borrower maintains a Deposit Account or the securities intermediary or commodity intermediary at which Borrower maintains a Securities Account or a Commodity Account, Borrower, and Bank pursuant to which Bank obtains control (within the meaning of the Code) over such Deposit Account, Securities Account, or Commodity Account.

**“Copyrights”** are any and all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret.

**“Credit Extension”** is any Term Loan Advance, or any other extension of credit by Bank for Borrower’s benefit.

**“Currency”** is coined money and such other banknotes or other paper money as are authorized by law and circulate as a medium of exchange.

**“Default”** means any event which with notice or passage of time or both, would constitute an Event of Default.

**“Default Rate”** is defined in Section 1.4(c).

**“Deposit Account”** is any “**deposit account**” as defined in the Code with such additions to such term as may hereafter be made.

**“Designated Deposit Account”** is the deposit account established by Borrower with Bank for purposes of receiving Credit Extensions.

**“Division”** means, in reference to any Person which is an entity, the division of such Person into two (2) or more separate Persons, with the dividing Person either continuing or terminating its existence as part of such division, including, without limitation, as contemplated under Section 18-217 of the Delaware Limited Liability Company Act for limited liability companies formed under Delaware law, Section 17-220 of the Delaware Revised Uniform Limited Partnership Act for limited partnerships formed under Delaware law, or any analogous action taken pursuant to any other Applicable Law with respect to any corporation, limited liability company, partnership or other entity.

**“Dollar Equivalent”** is, at any time, (a) with respect to any amount denominated in Dollars, such amount, and (b) with respect to any amount denominated in a Foreign Currency, the equivalent amount therefor in Dollars as determined by Bank at such time on the basis of the then-prevailing rate of exchange in San Francisco, California, for sales of the Foreign Currency for transfer to the country issuing such Foreign Currency.

**“Dollars,” “dollars”** or use of the sign “\$” means only lawful money of the United States and not any other currency, regardless of whether that currency uses the “\$” sign to denote its currency or may be readily converted into lawful money of the United States.

**“Draw Period”** is set forth on Schedule I hereto.

---

“**Effective Date**” is set forth on Schedule I hereto.

“**Environmental Laws**” means any Applicable Law (including any permits, concessions, grants, franchises, licenses, agreements or governmental restrictions) relating to pollution or the protection of health, safety or the environment or the release of any materials into the environment (including those related to hazardous materials, air emissions, discharges to waste or public systems and health and safety matters).

“**Equipment**” is all “equipment” as defined in the Code with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

“**ERISA**” is the Employee Retirement Income Security Act of 1974, as amended, and its regulations. “**Event of**

**Default**” is defined in Section 7.

“**Exchange Act**” is the Securities Exchange Act of 1934, as amended.

“**Excluded Accounts**” means any deposit accounts (i) that are used solely for payment of (A) payroll, earned bonuses, commissions, other compensation and related expenses, or (B) medical and dental claims to employees of Borrower or its Subsidiaries; or (ii) the balance of which consists exclusively of (A) withheld income taxes and federal, state or local employee taxes required to be paid to federal, state or local governmental agencies with respect to employees of Borrower or its Subsidiaries, or (B) amounts required to be paid over to an employee benefit plan, in case, to the extent identified by Borrower to Bank.

“**Excluded Taxes**” means any of the following Taxes imposed on or with respect to Bank or required to be withheld or deducted from a payment to Bank, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of Bank being organized under the laws of, or having its principal office or its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) U.S. federal withholding Taxes imposed on amounts payable to or for the account of Bank with respect to an applicable interest in a Credit Extension pursuant to a law in effect on the date on which (i) Bank acquires such interest in the Credit Extensions or (i) Bank changes its lending office, except in each case to the extent that, pursuant to Section 1.8, amounts with respect to such Taxes were payable either to Bank’s assignor immediately before Bank became a party hereto or to Bank immediately before it changed its lending office, (c) Taxes attributable to Bank’s failure to comply with Section 1.8(e), and (d) any withholding Taxes imposed under FATCA.

“**FATCA**” means Sections 1471 through 1474 of the Internal Revenue Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Internal Revenue Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among Governmental Authorities and implementing such Sections of the Internal Revenue Code.

“**Financial Statement Repository**” is Bank’s e-mail address specified in Section 9 or such other means of collecting information approved and designated by Bank after providing notice thereof to Borrower from time to time.

“**First Tranche**” is set forth on Schedule I hereto.

“**Foreign Currency**” is the lawful money of a country other than the United States.

“**Funding Date**” is any date on which a Credit Extension is made to or for the account of Borrower which shall be a Business Day.

“**FX Contract**” is any foreign exchange contract by and between Borrower and Bank under which Borrower commits to purchase from or sell to Bank a specific amount of Foreign Currency at a set price or on a specified date.

---

“**GAAP**” is generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other Person as may be approved by a significant segment of the accounting profession, which are applicable to the circumstances as of the date of determination.

“**General Intangibles**” is all “general intangibles” as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation, all Intellectual Property, claims, income and other tax refunds, security and other deposits, payment intangibles, contract rights, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including without limitation key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

“**Governmental Approval**” is any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

“**Governmental Authority**” is any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

“**Guarantor**” is any Person providing a Guaranty in favor of Bank.

“**Guaranty**” is any guarantee of all or any part of the Obligations, as the same may from time to time be amended, restated, modified or otherwise supplemented.

“**Indebtedness**” is (a) indebtedness for borrowed money or the deferred price of property or services, such as reimbursement and other obligations for surety bonds and letters of credit, (b) obligations evidenced by notes, bonds, debentures or similar instruments, (c) capital lease obligations, (d) Contingent Obligations and (e) other short- and long-term obligations under debt agreements, lines of credit and extensions of credit.

“**Indemnified Person**” is defined in Section 11.3.

“**Indemnified Taxes**” means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of Borrower under any Loan Document and (b) to the extent not otherwise described in clause (a), Other Taxes.

“**Information**” is defined in Section 11.8.

“**Insolvency Proceeding**” is any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, receivership or other relief.

“**Intellectual Property**” means, with respect to any Person, all of such Person’s right, title, and interest in and to the following:

- (a) its Copyrights, Trademarks and Patents;
  - (b) any and all trade secrets and trade secret rights, including, without limitation, any rights to unpatented inventions, know-how and operating manuals;
  - (c) any and all source code;
  - (d) any and all design rights which may be available to such Person;
-

(e) any and all claims for damages by way of past, present and future infringement of any of the foregoing, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the Intellectual Property rights identified above; and

(f) all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents.

“**Internal Revenue Code**” means the U.S. Internal Revenue Code of 1986, and the rules and regulations promulgated thereunder, each as amended or modified from time to time.

“**Inventory**” is all “**inventory**” as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including without limitation such inventory as is temporarily out of Borrower’s custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

“**Investment**” is any beneficial ownership interest in any Person (including stock, partnership, membership, or other ownership interest or other equity securities), and any loan, advance or capital contribution to any Person.

“**Key Person**” is each of Borrower’s (a) Chief Executive Officer, who is Drew Spaventa as of the Effective Date, and (b) Chief Science Officer, who is Eli Glezer as of the Effective Date.

“**Letter of Credit**” is a standby or commercial letter of credit issued by Bank upon request of Borrower based upon an application, guarantee, indemnity, or similar agreement.

“**Lien**” is a claim, mortgage, deed of trust, levy, attachment charge, pledge, hypothecation, security interest or other encumbrance of any kind, whether voluntarily incurred or arising by operation of law or otherwise against any property.

“**Liquidity**” is, at any time, the sum of the aggregate amount of unrestricted and unencumbered cash and Cash Equivalents held at such time by Borrower in Deposit Accounts maintained with Bank or its Affiliates and in Deposit Accounts subject to Control Agreements in favor of Bank.

“**Loan Documents**” are, collectively, this Agreement and any schedules, exhibits, certificates, notices, and any other documents related to this Agreement, the Perfection Certificate, Control Agreements, any Bank Services Agreement, any subordination agreement, any note, or notes or guaranties executed by Borrower or any Guarantor, landlord waivers and consents, bailee waivers and consents, and any other present or future agreement by Borrower and/or any Guarantor with or for the benefit of Bank in connection with this Agreement or Bank Services, all as amended, restated, or otherwise modified in accordance with the terms thereof.

“**Material Adverse Change**” is (a) a material impairment in the perfection or priority of Bank’s Lien in the Collateral or in the value of such Collateral; (b) a material adverse change in the business, operations, or condition (financial or otherwise) of Borrower; or (c) a material impairment of the prospect of repayment of any portion of the Obligations.

“**Net Income**” means, as calculated on a consolidated basis for Borrower and its Subsidiaries for any period as at any date of determination, the net profit (or loss), after provision for taxes, of Borrower and its Subsidiaries for such period taken as a single accounting period.

“**Obligations**” are Borrower’s obligations to pay when due any debts, principal, interest, fees, Bank Expenses, the Term Loan Prepayment Fee, the Term Loan Final Payment, and other amounts Borrower owes Bank now or later, whether under this Agreement, the other Loan Documents, or otherwise, including, without limitation, all obligations relating to Bank Services and interest accruing after Insolvency Proceedings begin and debts, liabilities, or obligations of Borrower assigned to Bank, and to perform Borrower’s duties under the Loan Documents.

“**OFAC**” is the Office of Foreign Assets Control of the United States Department of the Treasury and any successor thereto.

---

**“Operating Documents”** are, for any Person, such Person’s formation documents, as certified by the Secretary of State (or equivalent agency) of such Person’s jurisdiction of organization on a date that is no earlier than thirty (30) days prior to the Effective Date, and, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership or limited partnership, its partnership agreement or limited partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

**“Other Connection Taxes”** means, with respect to Bank, Taxes imposed as a result of a present or former connection between Bank and the jurisdiction imposing such Tax (other than connections arising from Bank having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Credit Extension or Loan Document).

**“Other Taxes”** means all present or future stamp, court, documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment.

**“Patents”** means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

**“Payment/Advance Form”** is that certain form in the form attached hereto as Exhibit B. **“Payment**

**Date”** is set forth on Schedule I hereto.

**“Perfection Certificate”** is the Perfection Certificate delivered by Borrower in connection with this Agreement.

**“Permitted Acquisition”** is any Acquisition by Borrower or any Subsidiary of Borrower disclosed to Bank, provided that each of the following shall be applicable to any such Acquisition:

(a) no Event of Default shall have occurred and be continuing or would result immediately after giving effect to such Acquisition;

(b) such transaction shall only involve assets comprising a business, or those assets of a business, of the type engaged in by Borrower and its Subsidiaries as of the date hereof (or any business reasonably related or ancillary thereto or a reasonable extension thereof, as determined in good faith by the Board);

(c) if the Acquisition includes a merger of Borrower, Borrower shall remain a surviving entity after giving effect to such Acquisition;

(d) the credit risk to Bank, in its sole discretion, shall not be increased as a result of such Permitted Acquisition;

(e) if, as a result of such Acquisition, a new Subsidiary of Borrower is formed or acquired, Borrower shall cause such Subsidiary to comply with Section 5.14, as required by Bank;

(f) Borrower shall provide Bank with written notice of the proposed Acquisition at least thirty (30) days prior to the anticipated closing date of the proposed Acquisition; and not less than five (5) Business Days prior to the anticipated closing date of the proposed Acquisition, copies of the acquisition agreement and all other material documents relative to the proposed Acquisition (or if such acquisition agreement and other material documents are not in final form, drafts of such acquisition agreement and other material documents; provided that Borrower shall deliver final forms of such acquisition agreement and other material documents promptly upon completion);

---

(g) the total cash and non-cash consideration payable (including, without limitation, any earnout payment obligations) plus the total Indebtedness (to the extent permitted hereunder) assumed for all such Acquisitions may not exceed Five Million Dollars (\$5,000,000) in the aggregate for all such Acquisitions during the term of this Agreement;

(h) no additional Indebtedness, other than Permitted Indebtedness, or liabilities shall be incurred, assumed or otherwise be reflected on a consolidated balance sheet of Borrower and the target after giving effect to such transaction;

(i) the acquisition is approved by the board of directors (or equivalent control group) of all parties to the transaction and the Acquisition is not otherwise an Unfriendly Acquisition; and

(j) Borrower shall provide Bank evidence satisfactory to Bank, in its commercially reasonable discretion, that after giving effect to any such Acquisition, Borrower has Remaining Months Liquidity, measured on a pro forma basis after giving effect to such Permitted Acquisition, of at least 12.00:1.00.

**“Permitted Indebtedness” is:**

- (a) Borrower’s Indebtedness to Bank under this Agreement and the other Loan Documents;
- (b) Indebtedness existing on the Effective Date which is shown on the Perfection Certificate;
- (c) Subordinated Debt;
- (d) unsecured Indebtedness to trade creditors incurred in the ordinary course of business;
- (e) Indebtedness incurred as a result of endorsing negotiable instruments received in the ordinary course of business;
- (f) Indebtedness secured by Liens permitted under clauses (a) and (c) of the definition of “Permitted Liens” hereunder;
- (g) unsecured Indebtedness incurred on a corporate credit cards in the ordinary course of business with other financial institutions in an aggregate outstanding amount not to exceed One Million Dollars (\$1,000,0000) at any time;
- (h) subject to compliance with the criteria for a Permitted Acquisition, Indebtedness consisting of obligations with respect to purchase price adjustments arising under agreements entered into in connection with a Permitted Acquisition;
- (i) other unsecured Indebtedness not otherwise permitted by Section 6.4 not exceeding Five Hundred Thousand Dollars (\$500,000) in the aggregate outstanding at any time; and
- (j) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (a) through (i) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose more burdensome terms upon Borrower or its Subsidiary, as the case may be.

**“Permitted Investments” are:**

- (a) Investments (including, without limitation, Investments in Subsidiaries), shown on the Perfection Certificate and existing on the Effective Date;
  - (b) Investments consisting of Cash Equivalents;
  - (c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of Borrower;
-

(d) Investments consisting of (i) Excluded Accounts; and (ii) deposit accounts (but only to the extent that Borrower is permitted to maintain such accounts pursuant to Section 5.9 of this Agreement) in which Bank has a first priority perfected security interest;

(e) Investments accepted in connection with Transfers permitted by Section 6.1;

(f) Investments consisting of the creation of a Subsidiary for the purpose of consummating a merger transaction permitted by Section 6.3 of this Agreement, which is otherwise a Permitted Investment;

(g) Investments by Borrower in Subsidiaries for the ordinary and necessary current operating expenses of such Subsidiaries in an amount not to exceed One Hundred Thousand Dollars (\$100,000) in the aggregate in any twelve-month period;

(h) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the ordinary course of business, and (ii) loans to employees, officers, directors, partners, managers and members relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee equity purchase plans or similar agreements approved by the Board;

(i) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business;

(j) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business; provided that this paragraph (j) shall not apply to Investments of Borrower in any Subsidiary; and

(k) other Investments not otherwise permitted by Section 6.7 in an aggregate amount not to exceed One Hundred Thousand Dollars (\$100,000) at any time.

**“Permitted Liens”** are:

(a) Liens existing on the Effective Date which are shown on the Perfection Certificate or arising under this Agreement or the other Loan Documents;

(b) Liens for Taxes, fees, assessments or other government charges or levies, either not due and payable or being contested in good faith and for which Borrower maintains adequate reserves on Borrower’s Books, provided that no notice of any such Lien has been filed or recorded under the Internal Revenue Code;

(c) purchase money Liens securing no more than Two Hundred Thousand Dollars (\$200,000) in the aggregate amount outstanding (i) on Equipment acquired or held by Borrower incurred for financing the acquisition of the Equipment, or (ii) existing on Equipment when acquired, if the Lien is confined to the property and improvements and the proceeds of the Equipment;

(d) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the ordinary course of business so long as such Liens attach only to Inventory, securing liabilities in the aggregate amount not to exceed Two Hundred Thousand Dollars (\$200,000) and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(e) Liens to secure payment of workers’ compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA);

(f) Liens incurred in the extension, renewal or refinancing of the Indebtedness secured by Liens described in (a) through (c), provided that any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness may not increase;

---

(g) leases or subleases of real property granted in the ordinary course of Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), and leases, subleases, non-exclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the ordinary course of Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), if the leases, subleases, licenses and sublicenses do not prohibit granting Bank a security interest therein;

(h) non-exclusive licenses, sublicenses and similar arrangements of Intellectual Property granted to third parties in the ordinary course of business and licenses of Intellectual Property that could not result in a legal transfer of title of the licensed property;

(i) Liens arising from attachments or judgments, orders, or decrees in circumstances not constituting an Event of Default under Sections 7.4 and 7.7;

(j) customary Liens of any bank in connection with statutory, common law and contractual rights of setoff and recoupment with respect to any deposit account or securities account of Borrower, provided that

(i) Bank has a first priority perfected security interest in such account and (ii) such account is permitted to be maintained pursuant to Section 5.9 of this Agreement; and

(k) Liens arising from the filing of any precautionary financing statement on operating leases covering the leased property, to the extent such operating leases are permitted under this Agreement.

“**Person**” is any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

“**Prime Rate**” is set forth on Schedule I hereto.

“**Prime Rate Margin**” is set forth on Schedule I hereto. “**Prior Loan**

**Agreement**” is defined in the preamble hereto.

“**Registered Organization**” is any “registered organization” as defined in the Code with such additions to such term as may hereafter be made.

“**Remaining Months Liquidity**” means, as of any date of determination, the result of (a) Liquidity divided by (b) Cash Burn.

“**Representatives**” is defined in Section 11.8.

“**Responsible Officer**” is any of the Chief Executive Officer, President, Chief Financial Officer and Controller of Borrower.

“**Restricted License**” is any material license or other material agreement with respect to which Borrower is the licensee (a) that prohibits or otherwise restricts Borrower from granting a security interest in Borrower's interest in such license or agreement or any other property, or (b) for which a default under or termination of could interfere with Bank's right to sell any Collateral. For the avoidance of doubt, licenses of off-the-shelf software, open source code, application programming interfaces (APIs) and/or other Intellectual Property rights of others that are commercially available to the public under shrinkwrap or clickwrap licenses, online terms of service or other terms of use, or similar agreements, and Intellectual Property rights of customers used by Borrower in the course of providing products and services to such customers in the ordinary course of business shall not constitute a Restricted License.

“**Sanctioned Person**” means a Person that: (a) is listed on any Sanctions list maintained by OFAC or any similar Sanctions list maintained by any other Governmental Authority having jurisdiction over Borrower; (b) is located, organized, or resident in any country, territory, or region that is the subject or target of Sanctions; or (c) is fifty percent (50.00%) or more owned or controlled by one (1) or more Persons described in clauses (a) and (b) hereof.

“**Sanctions**” means the economic sanctions laws, regulations, embargoes or restrictive measures administered, enacted or enforced by the United States government and any of its agencies, including, without limitation, OFAC and the U.S. State Department, or any other Governmental Authority having jurisdiction over Borrower.

“**SEC**” is the Securities and Exchange Commission, any successor thereto, and any analogous Governmental Authority.

“**Second Tranche**” is set forth on Schedule I hereto.

“**Securities Account**” is any “securities account” as defined in the Code with such additions to such term as may hereafter be made.

“**Subordinated Debt**” is indebtedness incurred by Borrower or any of its Subsidiaries subordinated to all of Borrower’s or any of its Subsidiaries’ now or hereafter indebtedness to Bank (pursuant to a subordination, intercreditor, or other similar agreement in form and substance satisfactory to Bank entered into between Bank and the other creditor), on terms acceptable to Bank.

“**Subsidiary**” is, as to any Person, a corporation, partnership, limited liability company or other entity of which shares of stock, partnership, membership, or other ownership interest or other equity securities having ordinary voting power (other than stock, partnership, membership, or other ownership interest or other equity securities having such power only by reason of the happening of a contingency) to elect a majority of the board of directors or other managers of such corporation, partnership or other entity are at the time owned, or the management of which is otherwise controlled, directly or indirectly through one or more intermediaries, or both, by such Person. Unless the context otherwise requires, each reference to a Subsidiary herein shall be a reference to a Subsidiary of Borrower.

“**Taxes**” means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

“**Term Loan Advance**” and “**Term Loan Advances**” are each defined in Section 1.2 of this Agreement. “**Term Loan Amortization Date**” is set forth on Schedule I hereto.

“**Term Loan Availability Amount**” is set forth on Schedule I hereto.

“**Term Loan Final Payment**” is a payment (in addition to and not a substitution for the regular monthly payments of principal plus accrued interest) due on the earliest to occur of (a) the Term Loan Maturity Date, (b) the repayment of the Term Loan Advances in full, (c) as required pursuant to Sections 1.2(c) or 1.2(d), or (d) the termination of this Agreement, in an amount equal to the aggregate principal amount of the Term Loan Advances advanced to Borrower multiplied by four percent (4.00%).

“**Term Loan Maturity Date**” is set forth on Schedule I hereto.

“**Term Loan Prepayment Fee**” shall be an amount equal to (i) three percent (3.00%) of the outstanding principal balance of all Term Loan Advances if the Term Loan Advances are repaid prior to the first anniversary of the Effective Date, (ii) two percent (2.00%) of the outstanding principal balance of all Term Loan Advances if the Term Loan Advances are repaid on or after the first anniversary of the Effective Date but prior to the second anniversary of the Effective Date, or (iii) one percent (1.00%) of the outstanding principal balance of all Term Loan Advances if the Term Loan Advances are repaid on or after the second anniversary of the Effective Date but prior to the Term Loan Maturity Date, provided that the Term Loan Prepayment Fee shall be waived if the Term Loan Advances are refinanced with a new loan facility from Bank.

“**Third Tranche**” is set forth on Schedule I hereto.

“**Third Tranche Availability Conditions**” is set forth on Schedule I hereto.

**“Trademarks”** means, with respect to any Person, any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of such Person connected with and symbolized by such trademarks.

**“Transfer”** is defined in Section 6.1.

**“UBS Account”** and **“UBS Accounts”** means Borrower’s accounts (\*\*\*\*\*502) and (\*\*\*\*\*503) maintained with UBS as set forth on the Perfection Certificate as of the Effective Date.

**“Unfriendly Acquisition”** means any Acquisition that has not, at the time of the first public announcement of an offer relating thereto, been approved by the board of directors (or other legally recognized governing body) of the Person to be acquired; except that with respect to any Acquisition of a non-U.S. Person, an otherwise friendly Acquisition shall not be deemed to be unfriendly if it is not customary in such jurisdiction to obtain such approval prior to the first public announcement of an offer relating to a friendly Acquisition.

**“USA Patriot Act”** means the “Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001” (Public Law 107-56, signed into law on October 26, 2001), as amended from time to time.

*[Signature page follows]*

---

**IN WITNESS WHEREOF**, the parties hereto have caused this Agreement to be executed as of the Effective Date.

**BORROWER:**

SINGULAR GENOMICS SYSTEMS, INC.

By: \_\_\_\_\_

Name: Dalen Meeter

Title: Senior Vice President, Finance and Secretary

**BANK:**

**SILICON VALLEY BANK**

By: \_\_\_\_\_

Name: Kristine Rohmer

Title: Director

---

**SCHEDULE I LSA**  
**PROVISIONS**

<b><u>LSA Section</u></b>	<b><u>LSA Provision</u></b>
1.2(a) – Term Loan – Availability	<p>(Subject to the terms and conditions of this Agreement and so long as a Material i )</p> <p>Adverse Change shall not have occurred and be continuing, on or about the Effective Date, Bank shall make a Term Loan Advance in an amount equal to Ten Million Five Hundred Thousand Dollars (\$10,500,000)(the “<b>First Tranche</b>”), which shall be used to repay all Obligations with respect to the Growth Capital Advances (as defined in the Prior Loan Agreement), including, without limitation, a portion of the Final Payment (as defined in the Prior Agreement) owing under the Prior Agreement as of the Effective Date in the amount of Four Hundred Thousand Dollars (\$400,000); provided, however, for the avoidance of doubt, the remaining portion of the Final Payment in the amount of One Hundred Fifty Thousand Dollars (\$150,000) and the Prepayment Fee (as defined in the Prior Loan Agreement) in the amount of Two Hundred Thousand Dollars (\$200,000) are hereby waived.</p> <p>( Up to Fifteen Million Dollars (\$15,000,000) of the Term Loan Availability Amount i (the “<b>Second Tranche</b>”) shall be available through the last day of the Draw Period. )</p> <p>( Up to Ten Million Dollars (\$10,000,000) of the Term Loan Availability Amount i (the “<b>Third Tranche</b>”) shall be available through the last day of the Draw Period, ) provided the Third Tranche Availability Conditions have been satisfied. Funds will be available under the Third Tranche upon Bank’s written confirmation to Borrower that Third Tranche Availability Conditions have been satisfied (as determined by Bank in its sole discretion).</p> <p>Each Term Loan Advance must be in an amount of at least Five Million Dollars (\$5,000,000). After repayment, no Term Loan Advance (or any portion thereof) may be reborrowed.</p>
1.2(b) – Term Loan – Repayment	Commencing on the Term Loan Amortization Date and continuing on each Payment Date thereafter, Borrower shall repay each Term Loan Advance in (i) twenty-four (24) equal monthly installments of principal, plus (ii) monthly payments of accrued interest at the rate set forth in Section 1.4(b)(ii) and this Schedule I.
1.4(a)(ii) – Interest Payments – Term Loan Advances	Interest on the principal amount of each Term Loan Advance is payable in arrears monthly (A) on each Payment Date commencing on the first Payment Date following the Funding Date of each such Term Loan Advance, (B) on the date of any prepayment and (C) on the Term Loan Maturity Date.
1.4(b)(i) – Interest Rate – Term Loan Advances	The outstanding principal amount of any Term Loan Advance shall accrue interest at a floating rate per annum equal to the greater of (1) four percent (4.00%) and (2) the Prime Rate plus the Prime Rate Margin, which interest shall be payable in accordance with Section 1.4(a).
1.4(e) – Interest Computation	Interest shall be computed on the basis of the actual number of days elapsed and a 360-day year.
12.2 – “Borrower”	“ <b>Borrower</b> ” means <b>Singular Genomics Systems, Inc.</b> , a Delaware corporation.

12.2 – “Draw Period”	“ <b>Draw Period</b> ” is the period commencing on the Effective Date and ending on the earlier to occur of (a) September 30, 2022 and (b) an Event of Default.
12.2 – “Effective Date”	“ <b>Effective Date</b> ” is September 30, 2021.
12.2 – “First Tranche”	“ <b>First Tranche</b> ” is defined in Section 1.2(a) of this Schedule I.
12.2 – “Payment Date”	“ <b>Payment Date</b> ” is the first (1st) calendar day of each month.
12.2 – “Prime Rate”	“ <b>Prime Rate</b> ” is the rate of interest per annum from time to time published in the money rates section of <u>The Wall Street Journal</u> or any successor publication thereto as the “prime rate” then in effect; provided that if such rate of interest, as set forth from time to time in the money rates section of <u>The Wall Street Journal</u> , becomes unavailable for any reason as determined by Bank, the “Prime Rate” shall mean the rate of interest per annum announced by Bank as its prime rate in effect at its principal office in the State of California (such Bank announced Prime Rate not being intended to be the lowest rate of interest charged by Bank in connection with extensions of credit to debtors); provided that, in the event such rate of interest is less than zero percent (0.00%) per annum, such rate shall be deemed to be zero percent (0.00%) per annum for purposes of this Agreement.
12.2 – “Prime Rate Margin”	“ <b>Prime Rate Margin</b> ” is three-quarters of one percent (0.75%)
12.2 – “Second Tranche”	“ <b>Second Tranche</b> ” is defined in Section 1.2(a) of this Schedule I.
12.2 – “Term Loan Amortization Date”	“ <b>Term Loan Amortization Date</b> ” is, for each Term Loan Advance, October 1, 2024.
12.2 – “Term Loan Availability Amount”	“ <b>Term Loan Availability Amount</b> ” is an aggregate principal amount not to exceed Twenty Five Million Five Hundred Thousand Dollars (\$25,500,000); provided, that if the Third Tranche Availability Conditions have been satisfied (as determined by Bank, in its sole discretion), the Term Loan Availability Amount shall be an aggregate principal amount not to exceed Thirty Five Million Five Hundred Thousand Dollars (\$35,500,000).
12.2 – “Term Loan Maturity Date”	“ <b>Term Loan Maturity Date</b> ” is September 1, 2026.
12.2 – “Third Tranche”	“ <b>Third Tranche</b> ” is defined in Section 1.2(a) of this Schedule I.
12.2 – “Third Tranche Availability Conditions”	“ <b>Third Tranche Availability Conditions</b> ” means, after the First and Second Tranches have been fully drawn by Borrower, during the Draw Period, following a written request by Borrower delivered to Bank requesting the Third Tranche, Bank’s written confirmation to Borrower to make the Third Tranche available, as determined by Bank in its sole discretion and contingent upon (i) Bank’s receipt of internal credit approval the Third Tranche, and (ii) Bank’s confirmation that no Default or Event of Default has occurred and is continuing or will result from such increase to the Term Loan Advances under the Third Tranche.

**EXHIBIT A**  
**COMPLIANCE STATEMENT**

TO: SILICON VALLEY BANK Date: \_\_\_ FROM: SINGULAR GENOMICS SYSTEMS, INC.

Under the terms and conditions of the Amended and Restated Loan and Security Agreement between Borrower and Bank (as amended, modified, supplemented and/or restated from time to time, the “**Agreement**”), Borrower is in complete compliance for the period ending \_\_\_ with all required covenants except as noted below. Attached are the required documents evidencing such compliance, setting forth calculations prepared in accordance with GAAP consistently applied from one period to the next except as explained in an accompanying letter or footnotes. Capitalized terms used but not otherwise defined herein shall have the meanings given them in the Agreement.

**Please indicate compliance status by circling Yes/No under “Complies” column.**

<b><u>Reporting Covenants</u></b>	<b><u>Required</u></b>	<b><u>Complies</u></b>
Quarterly financial statements with Compliance Statement and UBS Account Statements	Quarterly within 45 days (90 days for the fourth quarter of each fiscal year)	Yes No
UBS Account Statements	Quarterly within 30 days (monthly within 30 days after the funding of the Second Tranche)	
Annual financial statements (CPA Audited)	FYE within 180 days	Yes No
10-Q, 10-K and 8-K	Within 5 days after filing with SEC	Yes No
Board approved projections	No later than 45 days after FYE and as amended/updated	Yes No

The following are the exceptions with respect to the statements above: (If no exceptions exist, state “No exceptions to note.”)

**EXHIBIT B**  
**LOAN PAYMENT/ADVANCE REQUEST FORM**

**DEADLINE FOR SAME DAY PROCESSING IS NOON PACIFIC TIME**

Singular Genomics Systems, Inc. Date: \_\_\_

**LOAN PAYMENT:**

---

From Account # \_\_\_\_\_ To Account # \_\_\_\_\_ (Deposit Account #) (Loan Account #)  
Principal \$ \_\_\_\_\_ and/or Interest \$ \_\_\_\_\_  
Authorized Signature: \_\_\_\_\_ Print Name/Title: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
**LOAN ADVANCE:**

Complete *Outgoing Wire Request* section below if all or a portion of the funds from this loan advance are for an outgoing wire.

From Account # \_\_\_\_\_ To Account # \_\_\_\_\_ (Loan Account #) (Deposit Account #)

Amount of Term Loan Advance \$ \_\_\_\_\_

All Borrower's representations and warranties in the Amended and Restated Loan and Security Agreement are true, correct and complete in all material respects on the date of the request for an advance; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true and correct in all material respects as of such date:

Authorized Signature: \_\_\_\_\_ Print Name/Title: \_\_\_\_\_

Phone Number: \_\_\_\_\_

**OUTGOING WIRE REQUEST:**

**Complete only if all or a portion of funds from the loan advance above is to be wired.**

Deadline for same day processing is noon, Pacific Time

Beneficiary Name: \_\_\_\_\_ Amount of Wire: \$ \_\_\_\_\_ Beneficiary Bank: \_\_\_\_\_ Account Number: \_\_\_\_\_ City and State: \_\_\_\_\_

Beneficiary Bank Transit (ABA) #: \_\_\_\_\_

Beneficiary Bank Code (Swift, Sort, Chip, etc.): \_\_\_\_\_

**(For International Wire Only)**

Intermediary Bank: \_\_\_\_\_

Transit (ABA) #: \_\_\_\_\_

For Further Credit to: \_\_\_\_\_

Special Instruction: \_\_\_\_\_

*By signing below, I (we) acknowledge and agree that my (our) funds transfer request shall be processed in accordance with and subject to the terms and conditions set forth in the agreement(s) covering funds transfer service(s), which agreement(s) were previously received and executed by me (us).*

Authorized Signature: \_\_\_\_\_ 2<sup>nd</sup> Signature (if required): \_\_\_\_\_ Print Name/Title: \_\_\_\_\_ Print Name/Title: \_\_\_\_\_ Telephone #: \_\_\_\_\_  
Telephone #:

**CORPORATE BORROWING CERTIFICATE**

**BORROWER: Singular Genomics Systems, Inc. DATE: September 30, 2021 BANK: Silicon Valley Bank**

I hereby certify as follows, as of the date set forth above:

1. I am the Secretary, Assistant Secretary or other officer of the Borrower. My title is as set forth below.
  2. Borrower's exact legal name is set forth above. Borrower is a corporation existing under the laws of the State of Delaware.
  3. Attached hereto is a true, correct and complete copy of Borrower's Certificate of Incorporation (including amendments), as filed with the Secretary of State of the state in which Borrower is incorporated as set forth above. Such Certificate of Incorporation has not been amended, annulled, rescinded, revoked or supplemented, and remain in full force and effect as of the date hereof.
-

4. The following resolutions were duly and validly adopted by Borrower's Board of Directors at a duly held meeting of such directors (or pursuant to a unanimous written consent or other authorized corporate action). Such resolutions are in full force and effect as of the date hereof and have not been in any way modified, repealed, rescinded, amended or revoked, and Silicon Valley Bank ("Bank") may rely on them until Bank receives written notice of revocation from Borrower.

**RESOLVED**, that **any one** of the following officers or employees of Borrower, whose names and titles are below, may act on behalf of Borrower (for the avoidance of doubt, the following officers or employees shall be the only authorized signers in connection with the transactions described herein, notwithstanding any resolutions or certificates previously naming different officers or employees):

Name    Title

---

Authorized to Add or Remove Signatories

Andrew Spaventa Chief Executive Officer

Dalen Meeter Senior Vice President, Finance and Secretary

Daralyn Durie General Counsel

**RESOLVED FURTHER**, that **any one** of the persons designated above with a checked box beside his or her name may, from time to time, add or remove any individuals to and from the above list of persons authorized to act on behalf of Borrower.

**RESOLVED FURTHER**, that such individuals may, on behalf of Borrower:

**Borrow Money.** Borrow money from Bank.

**Execute Loan Documents.** Execute any loan documents Bank requires.

**Grant Security.** Grant Bank a security interest in any of Borrower's assets.

**Negotiate Items.** Negotiate or discount all drafts, trade acceptances, promissory notes, or other indebtedness in which Borrower has an interest and receive cash or otherwise use the proceeds.

**Apply for Letters of Credit.** Apply for letters of credit from Bank.

**Enter Derivative Transactions.** Execute spot or forward foreign exchange contracts, interest rate swap agreements, or other derivative transactions.

**Further Acts.** Designate other individuals to request advances, pay fees and costs and execute other documents or agreements (including documents or agreement that waive Borrower's right to a jury trial) they believe to be necessary to effect these resolutions.

**RESOLVED FURTHER**, that all acts authorized by the above resolutions and any prior acts relating thereto are ratified.

5. The persons listed above are Borrower's officers or employees with their titles shown next to their names.

6. On behalf of Borrower, I agree to execute this letter by electronic means and I recognize and accept the use of electronic signatures and records by any other party or addressee hereto in connection with the execution and storage hereof.

By: \_ Name: Dalen Meeter

Title: Senior Vice President, Finance and Secretary

*\*\*\* If the Secretary, Assistant Secretary or other certifying officer executing above is designated by the resolutions set forth in paragraph 4 as one of the authorized signing officers, this Certificate must also be signed by a second authorized officer or director of Borrower.*

I, the Chief Executive Officer of Borrower, hereby certify as to paragraphs 1 through 6 above, as of the date set forth above.

By: \_ Name: Andrew Spaventa

Title: Chief Executive Officer

---

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

I, Andrew Spaventa, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Singular Genomics Systems, 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)) 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) 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
  - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 9, 2021

By: \_\_\_\_\_  
*/s/ Andrew Spaventa*  
**Andrew Spaventa**  
**Chief Executive Officer**  
**(Principal Executive Officer)**

---

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

I, Dalen Meeter, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Singular Genomics Systems, 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)) 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) 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
  - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 9, 2021

By: \_\_\_\_\_ /s/ Dalen Meeter  
**Dalen Meeter**  
**Senior Vice President, Finance**  
*(Principal Financial Officer and Principal Accounting Officer)*

CERTIFICATIONS 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 Singular Genomics Systems, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Andrew Spaventa, 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 result of operations of the Company.

Date: November 9, 2021

By: \_\_\_\_\_ /s/ Andrew Spaventa  
**Andrew Spaventa**  
**Chief Executive Officer**  
*(Principal Executive Officer)*

---

CERTIFICATIONS 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 Singular Genomics Systems, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Dalen Meeter, 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 result of operations of the Company.

Date: November 9, 2021

By: \_\_\_\_\_ /s/ Dalen Meeter  
**Dalen Meeter**  
**Senior Vice President, Finance**  
*(Principal Financial Officer and Principal Accounting Officer)*

---

