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

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2024

OR

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

For the transition period from _____ to

Commission file number: 001-36571

T2 Biosystems, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**20-4827488**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
101 Hartwell Avenue Lexington, Massachusetts	**02421**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (781) 761-4646

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.001	TTOO	The Nasdaq Capital Market

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

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

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
Emerging growth company	☐		

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

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

As of May 2, 2024, the registrant had 8,792,950 shares of common stock outstanding.

T2 BIOSYSTEMS, INC.

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PART I.
FINANCIAL INFORMATION

Item 1. Financial Statements

T2 BIOSYSTEMS, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share data)
(Unaudited)

	March 31, 2024	December 31, 2023
Assets		
Current assets:		
Cash and cash equivalents	$ 6,208	$ 15,689
Accounts receivable, net	1,588	1,420
Inventories	4,670	4,819
Prepaid expenses and other current assets	3,094	3,261
Total current assets	15,560	25,189
Property and equipment, net	1,611	1,658
Operating lease right-of-use assets	7,031	7,395
Restricted cash	551	551
Other assets	2	4
Total assets	$ 24,755	$ 34,797
Liabilities and stockholders' deficit		
Current liabilities:		
Notes payable to related party	$ 41,666	$ 41,284
Accounts payable	1,887	1,527
Accrued expenses and other current liabilities	4,231	4,905
Accrued final payment fee on Term Loan with related party	4,767	4,807
Operating lease liability	1,651	1,616
Derivative liability related to Term Loan with related party	1,662	1,554
Warrant liabilities	207	235
Deferred revenue	185	224
Total current liabilities	56,256	56,152
Operating lease liabilities, net of current portion	6,180	6,598
Deferred revenue, net of current portion	92	83
Total liabilities	62,528	62,833
Commitments and contingencies (see Note 14)		
Stockholders' deficit		
Preferred stock, $0.001 par value; 10,000,000 shares authorized: Series B Convertible Preferred Stock, 10,875 shares designated on March 31, 2024, 10,875 and 93,297 shares issued and outstanding to related party on March 31, 2024 and December 31, 2023, respectively	—	—
Common stock, $0.001 par value; 400,000,000 shares authorized; 5,512,332 and 4,058,381 shares issued and outstanding on March 31, 2024 and December 31, 2023, respectively	6	4
Additional paid-in capital	560,051	556,256
Accumulated deficit	(597,830)	(584,296)
Total stockholders' deficit	(37,773)	(28,036)
Total liabilities and stockholders' deficit	$ 24,755	$ 34,797

See accompanying notes to condensed consolidated financial statements.

T2 BIOSYSTEMS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(In thousands, except share and per share data)
(Unaudited)

	Three Months Ended March 31,	
	2024	2023
Revenue:		
Product revenue	$ 2,061	$ 1,655
Contribution revenue	—	423
Total revenue	2,061	2,078
Costs and expenses:		
Cost of product revenue	4,202	3,995
Research and development	3,721	4,471
Selling, general and administrative	6,738	7,299
Total costs and expenses	14,661	15,765
Loss from operations	(12,600)	(13,687)
Other income (expense):		
Interest expense to related party	(1,179)	(1,522)
Change in fair value of derivative related to Term Loan with related party	(108)	(770)
Change in fair value of warrant liabilities	28	(1,304)
Other, net	325	(682)
Total other income (expense)	(934)	(4,278)
Net loss	$ (13,534)	$ (17,965)
Net loss per share — basic and diluted	$ (2.66)	$ (131.77)
Weighted-average number of common shares used in computing net loss per share — basic and diluted	5,094,809	136,333
Other comprehensive loss:		
Net loss	$ (13,534)	$ (17,965)
Total other comprehensive income, net of taxes	—	—
Comprehensive loss	$ (13,534)	$ (17,965)

See accompanying notes to condensed consolidated financial statements.

T2 BIOSYSTEMS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' DEFICIT
(In thousands, except share data)
(Unaudited)

	Series B Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount				
Balance on December 31, 2022	—	$ —	77,165	$ —	$ 494,564	$ (534,219)	$ —	$ (39,655)
Stock-based compensation expense	—	—	—	—	1,833	—	—	1,833
Issuance of common stock from vesting of restricted stock, exercise of stock options and employee stock purchase plan	—	—	643	—	—	—	—	—
Issuance of common stock from secondary offering, net	—	—	6,528	—	930	—	—	930
Issuance of common stock and Pre-Funded Warrant from public offering, net	—	—	90,173	—	4,031	—	—	4,031
Issuance of common stock upon Common Stock Warrant cashless exercises	—	—	11,718	—	938	—	—	938
Issuance of common stock upon Pre-Funded Warrant exercises	—	—	17,406	—	2	—	—	2
Net loss	—	—	—	—	—	(17,965)	—	(17,965)
Balance on March 31, 2023	—	$ —	203,633	$ —	$ 502,298	$ (552,184)	$ —	$ (49,886)

	Series B Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount				
Balance on December 31, 2023	93,297	$ —	4,058,381	$ 4	$ 556,256	$ (584,296)	$ —	$ (28,036)
Stock-based compensation expense	—	—	—	—	1,595	—	—	1,595
Issuance of common stock from vesting of restricted stock, exercise of stock options and employee stock purchase plan	—	—	1,549	—	—	—	—	—
Surrender of shares for tax withholding	—	—	(288)	—	(1)	—	—	(1)
Issuance of common stock from secondary offering, net	—	—	628,470	1	2,202	—	—	2,203
Conversion of Series B Convertible Preferred Stock into common stock by related party	(82,422)	—	824,220	1	(1)	—	—	—
Net loss	—	—	—	—	—	(13,534)	—	(13,534)
Balance on March 31, 2024	10,875	$ —	5,512,332	$ 6	$ 560,051	$ (597,830)	$ —	$ (37,773)

See accompanying notes to condensed consolidated financial statements.

T2 BIOSYSTEMS, INC.

CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS
(In thousands)
(Unaudited)

	Three Months Ended March 31,	
	2024	2023
Cash flows from operating activities		
Net loss	$ (13,534)	$ (17,965)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	64	256
Non-cash lease expense	364	321
Stock-based compensation expense	1,595	1,833
Change in fair value of derivative related to Term Loan with related party	108	770
Change in fair value of warrant liabilities	(28)	1,304
Issuance costs related to Common Stock Warrants	—	682
Loss on disposal of property and equipment	—	3
Non-cash interest expense to related party	341	526
Changes in operating assets and liabilities:		
Accounts receivable	(168)	840
Prepaid expenses and other assets	156	138
Inventories	149	(949)
Accounts payable	358	1,833
Accrued expenses and other liabilities	(675)	(2,211)
Deferred revenue	(30)	(1)
Operating lease liabilities	(383)	(320)
Net cash used in operating activities	(11,683)	(12,940)
Cash flows from investing activities		
Purchases and manufacture of property and equipment	—	(120)
Net cash used in investing activities	—	(120)
Cash flows from financing activities		
Payment of employee restricted stock tax withholdings	(1)	—
Proceeds from public offering, net of issuance costs		10,918
Proceeds from secondary offering, net of issuance costs	2,203	930
Net cash provided by financing activities	2,202	11,848
Net change in cash, cash equivalents and restricted cash	(9,481)	(1,212)
Cash, cash equivalents and restricted cash at beginning of period	16,240	11,880
Cash, cash equivalents and restricted cash at end of period	$ 6,759	$ 10,668

	Three Months Ended March 31,	
	2024	2023
Reconciliation of cash, cash equivalents and restricted cash at end of period		
Cash and cash equivalents	$ 6,208	$ 10,117
Restricted cash	551	551
Total cash, cash equivalents and restricted cash	$ 6,759	$ 10,668

	Three Months Ended March 31,	
	2024	2023
Supplemental disclosures of cash flow information		
Cash paid for interest to related party	$ 839	$ 1,009
Supplemental disclosures of noncash activities		
Transfer of T2 owned instruments and components from inventory	$ —	$ (298)
Cashless exercise of Common Stock Warrants	$ —	$ (938)
Purchases of property and equipment included in accounts payable and accrued expenses	$ 4	$ 136

See accompanying notes to condensed consolidated financial statements.

1. Nature of Business

T2 Biosystems, Inc. and its subsidiary (the "Company," "we," or "T2") have operations based in Lexington, Massachusetts. T2 Biosystems, Inc. was incorporated on April 27, 2006 as a Delaware corporation. The Company is an in vitro diagnostics company that has developed an innovative and proprietary technology platform that offers a rapid, sensitive and simple alternative to existing diagnostic methodologies. The Company has developed a broad set of applications aimed at lowering mortality rates, improving patient outcomes and reducing the cost of healthcare by helping medical professionals make targeted treatment decisions earlier. The Company's technology enables rapid detection of pathogens, biomarkers and other abnormalities in a variety of unpurified patient sample types, including whole blood, plasma, serum, saliva, sputum, cerebral spinal fluid and urine, and can detect cellular targets at limits of detection as low as one colony forming unit per milliliter ("CFU/mL"). We are currently targeting a range of critically underserved healthcare conditions, focusing initially on those for which a rapid diagnosis will serve an important dual role – saving lives and reducing costs. The Company's current development efforts primarily target sepsis, bioterrorism and Lyme disease, which are areas of significant unmet medical need in which existing therapies could be more effective with improved diagnostics.

Liquidity and Going Concern

On March 31, 2024, the Company had cash, cash equivalents, and restricted cash of $6.8 million, an accumulated deficit of $597.8 million, stockholders' deficit of $37.8 million, and has experienced cash outflows from operating activities since its inception. The future success of the Company is dependent on its ability to successfully commercialize its products, obtain regulatory clearance for and successfully launch its future product candidates, obtain additional capital and ultimately attain profitable operations. Historically, the Company has funded its operations primarily through public equity and private debt financings, including the Company's August 2014 initial public offering, the December 2015 public offering, the September 2016 private investment in public equity ("PIPE") financing, the September 2017 public offering, the June 2018 public offering, the July 2019 establishment of an equity distribution agreement and equity purchase agreement, the March 2021 establishment of an Equity Distribution Agreement (Note 9), the February 2023 public offering (Note 8), private placements of redeemable convertible preferred stock and through debt financing arrangements.

The Company believes its cash position is insufficient to fund future operations without financings by the first half of 2024, which may include public or private equity or debt financings. These financings may not be successful, however, or on terms favorable to the Company or its stockholders, which would have a negative impact on the Company's business, results of operations, financial condition and the Company's ability to develop and commercialize its products and ultimately operate as a going concern.

The Company is subject to a number of risks similar to other early commercial stage life science companies, including, but not limited to commercially launching the Company's products, development and market acceptance of the Company's product candidates, development by its competitors of new technological innovations, protection of proprietary technology, and raising additional capital.

In September 2023, the Company's milestone-based product development contract with the Biomedical Advanced Research and Development Authority ("BARDA") (Note 12) expired, which may impact the Company's ability to continue to fund the development of its next-generation products.

The Company's T2Dx Instrument and T2Candida, T2Bacteria, and the T2Biothreat Panels are authorized for use in the United States by the U.S. Food and Drug Administration ("FDA").

Pursuant to the requirements of Accounting Standards Codification 205-40, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern* ("ASC 205-40"), management must evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the financial statements are issued. This evaluation initially does not take into consideration the potential mitigating effect of management's plans that have not been fully implemented as of the date the financial statements are issued. When substantial doubt exists under this methodology, management evaluates whether the mitigating effect of its plans sufficiently alleviates substantial doubt about the Company's ability to continue as a going concern. The mitigating effect of management's plans, however, is only considered if both (1) it is probable that the plans will be effectively implemented within one year after the date that the financial statements are issued, and (2) it is probable that the plans, when implemented, will mitigate the relevant conditions or events that raise substantial doubt about the entity's ability to continue as a going concern within one year after the date that the financial statements are issued.

The Company believes that its cash, cash equivalents, and restricted cash of $6.8 million on March 31, 2024 will not be sufficient to fund its current operating plan for at least one year from issuance of these financial statements, as certain elements of its operating plan cannot be considered probable. Absent any reductions in current operating expenses, the Company believes it will require additional financing during the first half of 2024, which may include public or private equity or debt financings. Under ASC 205-40, the future receipt of potential funding from co-development partners and other resources cannot be considered probable at this time because none of the plans are entirely within the Company's control.

The Company's Term Loan Agreement (the "Term Loan Agreement") with certain entities managed by CR Group L.P., a Delaware limited partnership (each entity, a "CRG entity" and collectively, "CRG") (Note 6) has a minimum liquidity covenant, which initially required the Company to maintain a minimum cash balance of $5.0 million. In May 2023, CRG reduced the minimum liquidity covenant under the Term Loan Agreement from $5.0 million to $500,000 until December 31, 2023. In July 2023, the Company also converted $10.0 million of the outstanding debt with CRG to equity. In October 2023, the Term Loan Agreement was amended to extend both the interest-only period and the maturity date by one year from December 30, 2024 to December 31, 2025, and permanently reduce the minimum liquidity covenant from $5.0 million to $500,000. There can be no assurances that the Company will continue to be in compliance with the cash covenant in future periods without additional funding.

On March 30, 2023, the Company received notice from The Nasdaq Stock Market LLC ("Nasdaq") indicating that, for the last thirty consecutive business days, the bid price for the Company's common stock had closed below the minimum $1.00 per share requirement for continued listing on the Nasdaq Capital Market under Nasdaq Listing Rule 555(a)(2) (the "Minimum Bid Price Rule"). On May 23, 2023, Nasdaq notified the Company that its securities were subject to delisting due to non-compliance with the Minimum Bid Price Rule and to maintain a minimum value of listed securities (the "MVLS Rule") of at least $35 million. The Company requested a hearing with Nasdaq and, on July 6, 2023, appealed to the Nasdaq Hearings Panel for an extension to the time period in which to regain compliance with the MVLS Rule and the Minimum Bid Price Rule. On July 26, 2023, we filed a definitive proxy statement to effect a reverse stock split of our common stock in connection with our annual meeting that occurred in September 2023 as required by the Nasdaq Hearings Panel. On August 9, 2023, the Company received written notice from Nasdaq informing the Company that it had regained compliance with the MVLS Rule. On September 15, 2023, at the Company's annual meeting of stockholders, the Company's stockholders approved an amendment to the Company's restated certificate of incorporation to effect a reverse stock split of the Company's common stock. On October 12, 2023, the Company announced that its board of directors had approved the reverse stock split at the ratio of 1 post-split share for every 100 pre-split shares, which was effective as of October 12, 2023.

On October 31, 2023, the Company received written notice from Nasdaq informing the Company that it has regained compliance with the Minimum Bid Price Rule. The Company will be subject to a Mandatory Panel Monitor for a period of one year. If, within that one-year monitoring period, the Company fails to comply with the Minimum Bid Price Rule, the Company will not be permitted additional time to regain compliance with the Minimum Bid Price Rule. However, the Company will have an opportunity to request a new hearing with the Nasdaq Listing Qualifications Hearing Panel prior to the Company's securities being delisted from Nasdaq.

On November 20, 2023, the Company received written notice from Nasdaq informing the Company that it no longer satisfied the MVLS Rule. In accordance with the terms of the Mandatory Panel Monitor, the Company was not granted a grace period but rather issued a delist determination, which will be stayed if the Company exercises its right to appeal by requesting a hearing and paying a non-refundable $20,000 fee. The Company paid the $20,000 applicable fee and requested a new hearing, which will stay any further action by Nasdaq at least pending the issuance of its decision and the expiration of any extension that may be granted to the Company as a result of the hearing. The Company's common stock will remain listed and eligible to trade on Nasdaq pending the outcome of the hearing. On February 15, 2024, the Company appealed to the Nasdaq Hearings Panel for an extension to the time period in which to regain compliance with the MVLS Rule. On March 11, 2024, the Company received notice from the Nasdaq Hearings Panel that it had granted the Company's request for continued listing on Nasdaq, subject to the Company demonstrating compliance with Nasdaq's MVLS Rule on or before May 20, 2024.

These conditions raise substantial doubt regarding the Company's ability to continue as a going concern for a period of one year after the date that the financial statements are issued. Management's plans to alleviate the conditions that raise substantial doubt include raising additional funding, delaying certain research projects and capital expenditures, and eliminating certain future operating expenses in order to fund operations at reduced levels for the Company to continue as a going concern for a period of 12 months from the date these audited consolidated financial statements are issued. Management has concluded the likelihood that its plan to successfully obtain sufficient funding from one or more of these sources or maintain reduced expenditures, while reasonably possible, is less than probable. Accordingly, the Company has concluded that substantial doubt exists about the Company's ability to continue as a going concern for a period of at least 12 months from the date of issuance of these financial statements.

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of the uncertainties described above.

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company's financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"). Any reference in these notes to applicable guidance is meant to refer to the authoritative United States generally accepted accounting principles as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASU") of the Financial Accounting Standards Board ("FASB"). The Company's condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, T2 Biosystems Securities Corporation. All intercompany balances and transactions have been eliminated.

On October 12, 2023, the Company effected a 1-for-100 reverse stock split. One share of common stock was issued for every 100 shares of issued and outstanding common stock, and fractional shares were settled in cash. All references to share and per share amounts (excluding authorized shares) in the condensed consolidated financial statements and accompanying notes have been retroactively restated to account for the reverse split.

Prior to this, on October 12, 2022, the Company effected a 1-for-50 reverse stock split. One share of common stock was issued for every 50 shares of issued and outstanding common stock, and fractional shares were settled in cash.

Unaudited Interim Financial Information

Certain information and footnote disclosures normally included in the Company's annual financial statements have been condensed or omitted. Accordingly, these interim condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2023.

The accompanying interim condensed consolidated balance sheet as of March 31, 2024, the condensed consolidated statements of operations and comprehensive loss for the three months ended March 31, 2024 and 2023, the condensed consolidated statements of stockholders' deficit for the three months ended March 31, 2024 and 2023, the condensed consolidated statements of cash flows for the three months ended March 31, 2024 and 2023 and the related financial data and other information disclosed in these notes are unaudited. The unaudited interim financial statements have been prepared on the same basis as the audited annual financial statements, and, in the opinion of management, reflect all adjustments, consisting of normal recurring adjustments, necessary for the fair presentation of the Company's financial position as of March 31, 2024, and the results of its operations for the three months ended March 31, 2024 and 2023 and its cash flows for the three months ended March 31, 2024 and 2023. The results for the three months ended March 31, 2024 are not necessarily indicative of the results to be expected for the year ending December 31, 2024, any other interim periods, or any future year or period.

Segment Information

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company's chief operating decision maker is the Chief Executive Officer. The Company views its operations and manages its business in one operating segment, which is the business of developing and, upon regulatory clearance, commercially launching its diagnostic products aimed at lowering mortality rates, improving patient outcomes and reducing the cost of healthcare by helping medical professionals make targeted treatment decisions earlier.

Geographic Information

The Company sells its products domestically and internationally. Total international sales were approximately $1.0 million, or 49% of total revenue, and $0.8 million, or 36% of total revenue, for the three months ended March 31, 2024 and 2023, respectively.

International sales to Italy were approximately $0.4 million, or 20% of total revenue, and $0.4 million, or 19% of total revenue, for the three months ended March 31, 2024 and 2023, respectively. International sales to Austria were approximately $0.3 million, or 14% of total revenue, and $0.2 million, or 7% of total revenue, for the three months ended March 31, 2024 and 2023, respectively.

The following table shows customers that represent greater than 10% of total revenue for the period presented:

	Three Months Ended March 31,	
	2024	2023
Entity A	—%	20%
Customer A	20%	19%
Customer B	14%	—%

Entity A is a U.S. government entity (BARDA). Customers A and B are international distributors.

The following table shows customers that represent greater than 10% of the accounts receivable balance for the period presented:

	March 31, 2024	December 31, 2023
Customer A	22%	—%
Customer B	10%	—%
Customer C	—%	13%
Customer D	—%	16%

Customers A and B are international distributors. Customer C is a U.S. healthcare system comprised of multiple hospitals. Customer D is a clinical laboratory company.

As of March 31, 2024 and December 31, 2023, the Company had outstanding receivables of $0.9 million and $0.3 million, respectively, from customers located outside of the U.S.

Net Loss Per Share

As discussed in Note 7, the Company issued 93,297 shares of Series B Convertible Preferred Stock on July 3, 2023. As of March 31, 2024, 10,875 shares of Series B Convertible Preferred Stock remain issued and outstanding. The Company has reviewed the terms of the Series B Convertible Preferred Stock and noted that such stock has no preferential rights and that the liquidation preference for the Series B Convertible Preferred Stock would be on parity with that of the Company's common shares. Because the Series B Convertible Preferred Stock has the same level of subordination and, in substance, the same characteristics as the Company's common shares, the Company included the Series B Convertible Preferred Stock, on an if-converted basis of 108,750 shares, in the basic and diluted net loss per share attributable to common stockholders calculation.

The Company has also issued certain securities that are participating securities. Therefore, the Company must apply the two-class method to determine basic and diluted earnings per share. The two-class method is an earnings allocation method under which net loss per share is calculated for each class of common stock and participating security considering both dividends declared, if any, and participation rights in undistributed earnings as if all such earnings had been distributed for the period. The Company's participating securities do not have an obligation to share in the losses of the Company; therefore, to the extent that the Company remains in a net loss position, the entire net loss will be allocated to common stockholders.

Basic net loss per share is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, in-substance common stock, and potential common shares exercisable for little to no consideration, and does not consider other common stock equivalents.

Diluted net loss per share is calculated by adjusting the weighted-average number of shares outstanding, in-substance common stock, and potential common shares exercisable for little to no consideration used to compute basic earnings per share for the dilutive effect of other common stock equivalents that were outstanding during the period, determined using either the if-converted method or the treasury-stock method.

Derivative Instruments

The Company evaluates its financial instruments to determine if such instruments are derivatives or contain features that qualify as embedded derivatives requiring bifurcation in accordance with ASC Topic 815, *Derivatives and Hedging*. Derivative instruments are measured at fair value at issuance and at each reporting date in accordance with ASC 820 with changes in fair value recognized in the period of change in the condensed consolidated statements of operations and comprehensive loss.

The Company determined that both the warrant issued in conjunction with the Series A Redeemable Convertible Preferred Stock in August of 2022 and the Common Stock Warrants issued in February 2023 are derivative instruments. The warrant liabilities are classified on the condensed consolidated balance sheets as current because settlement of the warrant liability could be required by the holder within 12 months of the balance sheet date. Changes in fair value are recognized in change in fair value of warrant liabilities in the period of change in the condensed consolidated statements of operations and comprehensive loss. See Notes 3 and 8.

The Company has identified a derivative liability related to its Term Loan Agreement with CRG that is classified as a current liability on the condensed consolidated balance sheets to match the classification of the related Term Loan Agreement. Changes in fair value are recognized in change in fair value of derivative related to Term Loan in the period of change in the condensed consolidated statements of operations and comprehensive loss. See Note 6.

The Company does not designate its derivative instruments as hedging instruments.

Guarantees

As permitted under Delaware law, the Company indemnifies its officers and directors for certain events or occurrences while each such officer or director is, or was, serving at the Company's request in such a capacity. The term of the indemnification is the officer's or director's lifetime. The maximum potential amount of future payments the Company could be required to make is unlimited; however, the Company has directors' and officers' liability insurance coverage that limits its exposure and enables the Company to recover a portion of any future amounts paid.

The Company leases office, laboratory and manufacturing space under noncancelable operating leases. The Company has standard indemnification arrangements under the leases that require it to indemnify the landlords against all costs, expenses, fines, suits, claims, demands, liabilities, and actions directly resulting from any breach, violation or nonperformance of any covenant or condition of the Company's leases. See Note 14 for a discussion about the Billerica, Massachusetts lease.

In the ordinary course of business, the Company enters into indemnification agreements with certain suppliers and business partners where the Company has certain indemnification obligations limited to the costs, expenses, fines, suits, claims, demands, liabilities and actions directly resulting from the Company's gross negligence or willful misconduct, and in certain instances, breaches, violations or nonperformance of covenants or conditions under the agreements.

As of March 31, 2024 and December 31, 2023, the Company had not experienced any material losses related to these indemnification obligations, and no material claims with respect thereto were outstanding. The Company does not expect significant claims related to these indemnification obligations and, consequently, concluded that the fair value of these obligations is negligible, and no related reserves were established.

Leases

Lessee

Pursuant to ASC Topic 842, *Leases* ("ASC 842"), at the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the unique facts and circumstances present. Leases with a term greater than one year are recognized on the balance sheet as right-of-use assets, lease liabilities and long-term lease liabilities. The Company has elected not to recognize on the balance sheet leases with terms of one year or less. The exercise of lease renewal options is at the Company's discretion and the periods subject to renewal options are not included in the measurement of the Company's right-of-use assets and lease liabilities as the renewal options are not reasonably certain of exercise. The Company will continue to evaluate the renewal options and when they are reasonably certain of exercise, the Company will include the renewal period in its lease term. Operating lease liabilities and their corresponding right-of-use assets are recorded based on the present value of lease payments over the expected remaining lease term. However, certain adjustments to the right-of-use asset may be required for items such as prepaid or accrued lease payments. The interest rate implicit in lease contracts is typically not readily determinable. As a result, the Company utilizes its incremental borrowing rates, which are the rates incurred to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment.

In accordance with the guidance in ASC 842, components of a lease should be split into three categories: lease components (e.g., land, building, etc.), non-lease components (e.g., common area maintenance, consumables, etc.), and non-components (e.g., property taxes, insurance, etc.). Then the fixed and in-substance fixed contract consideration (including any related to non-components) must be allocated based on the respective relative fair values to the lease components and non-lease components.

The Company made the policy election to not separate lease and associated non-lease components. Each lease component and the related non-lease components are accounted for together as a single component.

Lessor

The Company derives revenue from leasing its T2-owned instruments through reagent rental agreements (see the Revenue Recognition section below). Customers typically have the right to cancel every twelve months, resulting in a lease term of generally one year. These lease agreements impose no requirement on the customer to purchase the instrument, and the instrument is not transferred to the customer at the end of the lease term. The short-term nature of the lease agreements does not result in lease payments accumulating to an amount that exceeds substantially all of the fair value of the instrument nor is the lease term for the majority of the remaining economic life of the instrument. Instrument leases are generally classified as operating leases as they do not meet any of the sales-type lease or direct financing lease criteria per ASC 842 and are recognized ratably over the duration of the lease. In accordance with these contracts, customers only make payments when consumables are ordered and delivered thus making these payments variable by nature. The Company estimates the expected volume of consumables to be purchased by each customer over the lease term to measure and recognize rental and consumables revenue.

Generally, lease arrangements include both lease and non-lease components. The lease component relates to the customer's right-to-use the T2-owned instrument over the lease term. The non-lease components relate to (1) consumables and (2) maintenance services. Because the timing and pattern of transfer for the operating lease component, the T2-owned instrument, and maintenance components of a reagent rental agreement are recognized over the same time period and in the same pattern, the Company elected the practical expedient to aggregate non-lease components with the associated lease component and account for the combined component as an operating lease for all instrument leases. In the evaluation of whether the lease component (T2-owned instrument) or the non-lease component associated with the lease component (maintenance) is the predominant component, the Company determined that the lease component is predominant as we believe the customer would ascribe more value to the use of the T2-owned instrument than that of the maintenance services. The T2-owned instrument lease and maintenance service performance obligations are classified as a single category of instrument rental revenue within product revenue in the condensed consolidated statements of operations and comprehensive loss (see disaggregated revenue table below in Revenue Recognition section). The consumables non-lease component does not meet the requirements to elect the practical expedient because of its point-in-time pattern of transfer (versus over time for the combined lease component) and therefore must apply ASC Topic 606, *Revenue from Contracts with Customers*, as described below in the Revenue Recognition section.

The Company considers the economic life of its T2-owned instruments to be five years. The Company believes five years is representative of the period during which the instrument is expected to be economically usable by one or more users, with normal service, for the purpose for which it is intended. The residual value is estimated to be the value at the end of the lease term based on the anticipated fair market value of the units. The Company mitigates residual value risk of its leased instrument by performing regular management and maintenance, as necessary.

Revenue Recognition

The Company generates revenue from the sale of instruments, consumable diagnostic tests, related services, reagent rental agreements and government contributions. For arrangements in the scope of ASC Topic 606, *Revenue from Contracts with Customers* ("ASC 606"), the Company determines revenue recognition through the following steps:

- Identification of a contract with a customer
- Identification of the performance obligations in the contract
- Determination of the transaction price
- Allocation of the transaction price to the performance obligations
- Recognition of revenue as a performance obligation is satisfied

The amount of revenue recognized reflects the consideration the Company expects to be entitled to receive in exchange for these goods and services.

Once a contract is determined to be within the scope of ASC 606 at contract inception, the Company reviews the contract to determine which performance obligations the Company must deliver and which of these performance obligations are distinct. The Company recognizes as revenues the amount of the transaction price that is allocated to the respective performance obligation when the performance obligation is satisfied or as it is satisfied. Generally, the Company's performance obligations are transferred to customers either at a point in time, typically upon shipment, or over time, as services are performed. Contracts typically have net 30 payment terms in the U.S. and net 60 payment terms internationally.

Most of the Company's contracts with distributors in geographic regions outside the United States contain only a single performance obligation, whereas most of the Company's contracts with direct sales customers in the United States contain multiple performance obligations. For these contracts, the Company accounts for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. Excluded from the transaction price are sales tax and other similar taxes which are presented on a net basis.

Product revenue is generated by the sale of instruments and consumable diagnostic tests predominantly through the Company's direct sales force in the United States and distributors in geographic regions outside the United States. The Company generally does not offer product returns or exchange rights (other than those relating to defective goods under warranty) or price protection allowances to its customers, including its distributors. Payment terms granted to distributors are the same as those granted to end-user customers and payments are not dependent upon the distributors' receipt of payment from their end-user customers.

The Company either sells instruments to customers and international distributors or retains title and places the instrument at the customer site pursuant to a reagent rental agreement. When an instrument is purchased by a customer or international distributor, the Company recognizes revenue when the related performance obligation is satisfied (i.e., when the control of an instrument has passed to the customer; typically, at shipping point).

When the instrument is placed under a reagent rental agreement, the Company's customers generally agree to fixed term agreements, which can be extended, and incremental charges on each consumable diagnostic test purchased. Revenue from the sale of consumable diagnostic tests (under a reagent rental agreement) is generally recognized upon shipment. The transaction price from consumables purchases is allocated between the lease and non-lease components when related performance obligations are satisfied, as a component of lease and product revenue, and is included as Instrument Rentals in the below table. Revenue associated with reagent rental consumables purchases is currently classified as variable consideration and constrained until a purchase order is received and related performance obligations have been satisfied.

Revenue from the sale of consumable diagnostic tests (under instrument purchase agreements) is recognized when control has passed to the customer, typically at shipping point.

Shipping and handling costs billed to customers in connection with a product sale are recorded as a component of the transaction price and allocated to product revenue in the condensed consolidated statements of operations and comprehensive loss as they are incurred by the Company in fulfilling its performance obligations.

Direct sales of instruments include warranty, maintenance and technical support services typically for one year following the installation of the purchased instrument ("Maintenance Services"). Maintenance Services are separate performance obligations as they are service based warranties and are recognized on a straight-line basis over the service delivery period. After the completion of the initial Maintenance Services period, customers have the option to renew or extend the Maintenance Services typically for additional one-year periods in exchange for additional consideration. The extended Maintenance Services are also service based warranties that represent separate purchasing decisions. The Company recognizes revenue allocated to the extended Maintenance Services performance obligation on a straight-line basis over the service delivery period.

Fees paid to member-owned group purchasing organizations ("GPOs") are deducted from related product revenues.

The Company warrants that consumable diagnostic tests will be free from defects, when handled according to product specifications, for the stated life of the product. To fulfill valid warranty claims, the Company provides replacement product free of charge. Warranty expense is recognized based on the estimated defect rates of the consumable diagnostic tests.

Contribution Revenue

The government contract with BARDA was considered a government grant and not considered a contract with a customer and thus not subject to ASC 606. Revenue under the government BARDA contract was earned under a cost-sharing arrangement in which the Company was reimbursed for direct costs incurred plus allowable indirect costs. The government contract revenue was recognized as the related reimbursable expenses were incurred. The cost reimbursement that was reported as revenue was presented gross of the related reimbursable expenses in the Company's condensed consolidated statements of operations and comprehensive loss; the related reimbursable expenses were expensed as incurred as research and development expense. The Company accounted for these contracts as a government grant by analogy to International Accounting Standards 20 ("IAS 20"), *Accounting for Government Grants and Disclosure of Government Assistance*.

The BARDA contract expired in September 2023.

Disaggregation of Revenue

The Company disaggregates revenue from contracts with customers by type of products and services, as it best depicts how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors. The following table disaggregates our revenue by major source (in thousands):

	Three Months Ended March 31,	
	2024	2023
Product revenue		
Instruments	464	322
Consumables	1,405	1,177
Instrument rentals	63	55
Service	129	101
Total product revenue	2,061	1,655
Contribution revenue	—	423
Total revenue	$ 2,061	$ 2,078

Remaining Performance Obligations

Under ASC 606, the Company is required to disclose the aggregate amount of the transaction price that is allocated to unsatisfied or partially satisfied performance obligations as of March 31, 2024. However, the guidance provides certain practical expedients that limit this requirement, and therefore, the Company has elected to not disclose the value of unsatisfied performance obligations for contracts with an original expected length of one year or less. The nature of the excluded unsatisfied performance obligations pursuant to the practical expedient include consumable shipments, service contracts, warranties and installation services that will be performed within one year. The amount of the transaction price that is allocated to unsatisfied or partially satisfied performance obligations, that has not yet been recognized as revenue and that does not meet the elected practical expedient is $0.2 million as of March 31, 2024. The Company expects to recognize 61% of this amount as revenue within one year and the remainder within three years.

Judgments

Certain contracts with customers include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. Once the performance obligations are determined, the Company determines the transaction price, which includes estimating the amount of variable consideration, based on the most likely amount, to be included in the transaction price, if any. The Company then allocates the transaction price to each performance obligation in the contract based on a relative standalone selling price method. The corresponding revenue is recognized as the related performance obligations are satisfied as discussed in the revenue categories above.

Judgment is required to determine the standalone selling price for each distinct performance obligation. The Company determines standalone selling price based on the price at which the performance obligation is sold separately. If the standalone selling price is not observable through past transactions, the Company estimates the standalone selling price taking into account available information such as a range of selling prices, market conditions and the expected costs and margin related to the performance obligations.

Contract Assets and Liabilities

The Company's contract assets represent revenue recognized for performance obligations in advance of invoicing at the contract level based on the transaction price allocated to the respective performance obligations. The opening and closing balances of the Company's contract assets were $0.1 million and $0.1 million for the three months ended March 31, 2024, respectively, and $0.1 million and $0.2 million for the three months ended March 31, 2023, respectively.

The Company’s contract liabilities consist of upfront payments for maintenance services on instrument sales. Contract liabilities are classified in deferred revenue as current or non-current based on the timing of when revenue is expected to be recognized. The opening and closing balances of the Company's contract liabilities were $0.3 million and $0.3 million for the three months ended March 31, 2024, respectively, and $0.2 million and $0.2 million for the three months ended March 31, 2023, respectively. Revenue recognized during the three months ended March 31, 2024 relating to contract liabilities on December 31, 2023 was $0.1 million and related to straight-line revenue recognition associated with maintenance agreements.

Accounts Receivable, Net

The opening and closing balances of the Company's accounts receivable, net were $1.4 million and $1.6 million for the three months ended March 31, 2024, respectively, and $2.2 million and $1.3 million for the three months ended March 31, 2023, respectively.

Cost of Product Revenue

Cost of product revenue includes the cost of materials, direct labor and manufacturing overhead costs used in the manufacture of consumable diagnostic tests sold to customers, related warranty and license and royalty fees. Cost of product revenue also includes depreciation on T2-owned revenue generating T2Dx Instruments that have been placed with customers under reagent rental agreements; costs of materials, direct labor and manufacturing overhead costs on the T2Dx Instruments sold to customers; and other costs such as customer support costs, royalties and license fees, warranty and repair and maintenance expense on the T2Dx Instruments that have been placed with customers under reagent rental agreements.

Research and Development Costs

Costs incurred in the research and development of the Company’s product candidates are expensed as incurred. Research and development expenses consist of costs incurred in performing research and development activities, including activities associated with delivering products or services associated with contribution revenue, clinical trials to evaluate the clinical utility of product candidates, and costs associated with the enhancements of developed products. These costs include salaries and benefits, stock compensation, research related facility and overhead costs, laboratory supplies, equipment, depreciation on T2Dx Instruments used for research and development activities and contract services.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consist primarily of costs for the Company’s sales and marketing, finance, legal, human resources, business development and general management functions, as well as professional services, such as legal, consulting and accounting services. Other selling, general and administrative expenses include commercial support activity, facility-related costs, fees and expenses associated with obtaining and maintaining patents, clinical and economic studies and publications, marketing expenses, and travel expenses. The Company expenses the majority of selling, general and administrative expenses as incurred.

Impairment of Long-lived Assets

The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Impairment is evaluated by comparing the carrying value of the long-lived assets with the estimated future net undiscounted cash flows expected to result from the use of the assets, including cash flows from disposition. Should the sum of the expected future net cash flows be less than the carrying value, the Company would recognize an impairment loss at that date. An impairment loss would be measured by comparing the amount by which the carrying value exceeds the fair value, or the estimated discounted future cash flows, of the long-lived assets.

Recent Accounting Standards

From time to time, new accounting pronouncements are issued by the FASB or other standard setting bodies and adopted by the Company as of the specified effective date. Unless otherwise discussed, the Company believes that its adoption of recently issued standards that are not yet effective will not have a material impact on its financial position or results of operations at the respective effective dates.

Accounting Standards Issued, To Be Adopted

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures* (“ASU 2023-07”). This ASU was issued to improve the disclosures about a public entity’s reportable segments and address requests from investors for more detailed information about a reportable segment’s expenses. This update will be effective for the Company for fiscal years beginning after December 15, 2023 and interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted. The Company is currently assessing the impact of this update on its disclosures.

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures* (“ASU 2023-09”). This ASU was issued to enhance the transparency and decision usefulness of income tax disclosures. This update will be effective for the Company for fiscal years beginning after December 15, 2024. Early adoption is permitted. The Company is currently assessing the impact of this update on its disclosures.

3. Fair Value Measurements

The Company measures the following financial assets at fair value on a recurring basis. There were no transfers between levels of the fair value hierarchy during any of the periods presented. The following tables set forth the Company's financial assets and liabilities carried at fair value categorized using the lowest level of input applicable to each financial instrument as of March 31, 2024 and December 31, 2023 (in thousands):

	Balance at March 31, 2024	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Money market funds	$ 3,750	$ 3,750	$ —	$ —
	$ 3,750	$ 3,750	$ —	$ —
Liabilities:				
Warrant liabilities	$ 207	$ —	$ 207	$ —
Derivative liability related to Term Loan with related party	1,662	—	—	1,662
	$ 1,869	$ —	$ 207	$ 1,662

	Balance at December 31, 2023	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Money market funds	$ 8,500	$ 8,500	$ —	$ —
	$ 8,500	$ 8,500	$ —	$ —
Liabilities:				
Warrant liabilities	$ 235	$ —	$ 235	$ —
Derivative liability related to Term Loan with related party	1,554	—	—	1,554
	$ 1,789	$ —	$ 235	$ 1,554

The Company's cash equivalents are comprised of money market funds and money market accounts as of March 31, 2024 and December 31, 2023. The Company also maintains money market accounts classified as restricted cash, which are Level 1 assets, for $0.6 million on both March 31, 2024 and December 31, 2023 (Note 4).

The Company estimated the fair value of the warrant issued in conjunction with the Series A Redeemable Convertible Preferred Stock in August of 2022 (the "Series A Warrant") (Note 8) using the Black-Scholes Model, which uses multiple inputs including the Company's stock price, the exercise price of the warrant, volatility of the Company's stock price, the risk-free interest rate and the expected term of the warrant.

The estimated fair value of the Series A Warrant on March 31, 2024 was determined using the following assumptions:

Risk-free interest rate	4.32%
Expected dividend yield	0.00%
Expected volatility	144.00%
Expected term	3.88

The Company estimated the fair value of the Common Stock Warrant issued in February of 2023 (the "Common Stock Warrant") (Note 8) using both the Black-Scholes Model and Monte Carlo simulation methods to model different potential settlement outcomes. These models use multiple inputs including the Company's stock price, the exercise price of the warrant, volatility of the Company's stock price, the risk-free interest rate and the expected term of the warrant. Such inputs may vary depending on the model applied and the underlying scenario assumptions. Key inputs included the warrant exercise price of $108.00 per share, a risk-free interest rate of 4.32%, expected volatility ranging from 90% to 219%, an expected dividend yield of 0.00%, a stock price of $3.63 (adjusted to reflect volume weighting) and an expected term ranging from zero years to 3.88 years, depending on the simulation.

The following table provides a roll-forward of the fair value of the Common Stock Warrants (in thousands):

Balance on December 31, 2023	$	233
Change in fair value		(27)
Balance on March 31, 2024	$	206

The Company has a single compound derivative instrument related to its Term Loan Agreement (Note 6) that requires the Company to pay additional interest of 4% per annum upon an event of default or if any obligation other than the unpaid principal amount of the Term Loan is not paid when due. Fair value is determined quarterly. The fair value of the derivative on March 31, 2024 and December 31, 2023 is $1.7 million and $1.6 million, respectively, and is classified as a current liability on the condensed consolidated balance sheets to match the classification of the related Term Loan Agreement (Note 6).

The estimated fair value of the derivative on March 31, 2024 was determined using a probability-weighted discounted cash flow model that includes contingent interest payments under the following scenarios:

	Probability
4% contingent interest beginning in Q2 2024	50%

Changes in assumptions regarding the probability of the 4% contingent interest feature being triggered and the timing of such a triggering event could significantly affect the estimated fair value of this derivative liability.

The following table provides a roll-forward of the fair value of the derivative liability (in thousands):

Balance on December 31, 2023	$	1,554
Change in fair value of derivative related to Term Loan with related party		108
Balance on March 31, 2024	$	1,662

The Company is required to disclose the fair value and the level within the fair value hierarchy for financial instruments that are not measured at fair value on a recurring basis. For certain financial instruments, including accounts receivable, prepaid expenses and other current assets, accounts payable and accrued expenses, the carrying amounts approximate their fair values as of March 31, 2024 and December 31, 2023 because of their short-term nature. Cash and cash equivalents were classified as Level 1 and all other financial instruments were classified as Level 2 within the fair value hierarchy. The Company used Level 3 inputs to measure the fair value of its Term Loan Agreement. Based on these measurements, the Company concluded that the carrying value of the Term Loan Agreement approximates its fair value on March 31, 2024.

4. Restricted Cash

The Company is required to maintain security deposits for its office lease agreements. On both March 31, 2024 and December 31, 2023, the Company had lease security deposits, invested in money market accounts, aggregating $0.6 million. In January 2023, one of the Company's deposits of $1.0 million was claimed by a landlord as compensation for a lease dispute (Note 14). The remaining collateral deposits aggregating $0.6 million were held at Silicon Valley Bank, which was taken over by the FDIC in March 2023. The Company’s full exposure was ultimately covered by the FDIC and no loss was incurred.

5. Supplemental Balance Sheet Information

Inventories

Inventories are stated at the lower of cost or net realizable value on a first-in, first-out basis and are comprised of the following (in thousands):

		March 31, 2024		December 31, 2023
Raw materials	$	2,208	$	1,881
Work-in-process		1,725		1,441
Finished goods		737		1,497
Total inventories	$	4,670	$	4,819

Property and Equipment, net

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

	March 31, 2024	December 31, 2023
Office and computer equipment	$ 710	$ 710
Software	778	778
Laboratory equipment	5,094	5,104
Furniture	198	198
Manufacturing equipment	1,127	1,109
Manufacturing tooling and molds	371	371
T2-owned instruments and components	3,709	3,549
Leased T2-owned instruments	899	1,059
Leasehold improvements	3,608	3,608
Construction in progress	21	23
	16,515	16,509
Less accumulated depreciation and amortization	(14,904)	(14,851)
Property and equipment, net	$ 1,611	$ 1,658

Construction in progress is primarily comprised of equipment that has not been placed in service. T2-owned instruments and components is primarily comprised of instruments that will be used for internal research and development, clinical studies and reagent rental agreement with customers. Depreciation expense, a component of cost of product revenue, from instruments under the T2-owned reagent rental pool was $0.1 million for the three months ended March 31, 2024 and immaterial for the three months ended March 31, 2023.

Total depreciation expense for T2-owned instruments used for internal research and development and clinical studies is recorded as a component of research and development expense. Depreciation and amortization expense of $0.1 million and $0.3 million was charged to operations for the three months ended March 31, 2024 and 2023, respectively.

Accrued Expenses

Accrued expenses consist of the following (in thousands):

	March 31, 2024	December 31, 2023
Accrued payroll and compensation	$ 1,760	$ 2,705
Accrued clinical trial and development expenses	529	285
Accrued professional services	496	554
Accrued interest	838	839
Other accrued expenses	608	522
Total accrued expenses and other current liabilities	$ 4,231	$ 4,905

6. Notes Payable

Term Loan Agreement

In December 2016, the Company entered into the Term Loan Agreement with CRG. The Company initially borrowed $40.0 million under the Term Loan Agreement and had the ability to borrow an additional $10.0 million upon receiving specified clearance for the marketing of T2Bacteria by April 30, 2018 (the “Approval Milestone”). The Company agreed to pay (1) a financing fee based on the amount of principal drawn and (2) a final payment fee based on the principal outstanding upon repayment. The debt discount related to the financing fee and the fees paid to CRG are being amortized over the loan term as interest expense. Interest expense for the debt discount was less than $0.1 million for both the three months ended March 31, 2024 and 2023. The final payment fee is accrued as interest expense and is classified consistent with the classification of the Term Loan. The effective interest rate of the Term Loan was 10.2% as of March 31, 2024.

The Term Loan’s principal is prepayable at any time partially or in full without a prepayment penalty. Borrowings are collateralized by a lien on substantially all Company assets, including intellectual property. The Term Loan Agreement provides for

affirmative and negative covenants, including a requirement to maintain a minimum cash balance of $5.0 million. The Term Loan Agreement includes a subjective acceleration clause whereby an event of default, including a material adverse change in the business, operations, or conditions (financial or otherwise), could result, at CRG's discretion, in the acceleration of the obligations under the Term Loan Agreement. Under certain circumstances, a default interest rate of an additional 4.0% per annum may apply, at CRG's discretion, on all outstanding obligations during the occurrence and continuance of an event of default.

The Term Loan originally had a six-year term, with three years of interest-only payments accruing at a fixed rate of 12.5%, of which 4.0% could be paid in-kind by increasing the principal balance. After achievement of the Approval Milestone, such rates would be reduced and a fourth year of interest-only payments would be granted, after which quarterly payments of principal and interest would be owed through the December 30, 2022 maturity date. Upon achievement of certain performance metrics, the loan would be converted to interest-only until its maturity, at which time all unpaid principal and interest would be due and payable.

In connection with the Term Loan Agreement, the Company issued warrants to CRG to purchase a total of 105 shares of the Company's common stock, exercisable any time prior to December 30, 2026.

Amendments

The Term Loan Agreement has been amended nine times as of March 31, 2024. As a result of those amendments, certain terms of the Term Loan have been revised as follows:

- In 2018, upon the Company's achievement of the Approval Milestone, interest on borrowings began accruing at 11.50% per year, 8% of which is payable in cash quarterly and 3.5% of which is deferred and added to principal until maturity.
- In 2019:
  - The final payment fee was increased from 8% to 10% of the principal outstanding upon repayment.
  - The Company issued additional warrants to CRG to purchase 113 shares of its common stock, exercisable any time prior to September 9, 2029 at an exercise price of $7,750.00 per share, with provisions for termination upon a change of control or a sale of all or substantially all of the assets of the Company (these warrants, along with the warrants to purchase 105 shares of common stock previously issued to CRG, are collectively referred to as the "CRG Warrants").
  - The Company reduced the exercise price for the warrants previously issued to CRG to $7,750.00.
- In 2022, the principal maturity date was extended to December 30, 2024, and the Term Loan's interest-only payment period was extended until that maturity date.
- In 2023:
  - The Company and CRG entered into a waiver and consent that reduced the minimum liquidity covenant to $500,000 until December 31, 2023.
  - CRG waived certain specified events of default associated with the Company's issuance of shares of Series A Redeemable Convertible Preferred Stock in August 2022 and the subsequent redemption (Note 7).
  - In July 2023, CRG canceled $10.0 million of the Term Loan's principal in exchange for 483,457 shares of common stock and 93,297 shares of Series B Convertible Preferred Stock.
  - In October 2023, the interest-only period and maturity of the Term Loan were extended to December 31, 2025 and the $500,000 liquidity covenant was made permanent.

The warrants to purchase 218 shares of the Company's common stock remain outstanding on March 31, 2024. There were no covenant violations during the three months ended March 31, 2024.

Amendments made in February 2022, November 2022, October 2023, and the partial principal cancellation in July 2023 were accounted for as troubled debt restructurings. For all restructurings, at the time of the restructuring the future undiscounted cash outflows required under the amended agreement exceeded the carrying value of the debt and no gain was recognized as a result of the restructurings. The effects of each restructuring were accounted for prospectively.

Securities Purchase Agreement

On February 15, 2024, the Company entered into a Securities Purchase Agreement with CRG and affiliated entities pursuant to which the Company will issue (i) shares of the Company's common stock and (ii) to the extent that the issuance of the shares common

stock results in CRG beneficially owning greater than 49.99% of the Company's outstanding shares of common stock (or in the case of one of the affiliated entities, greater than 9.99% of the Company's outstanding shares of common stock, determined without regard to any convertible securities held by CRG or affiliated entities), shares of newly designated convertible preferred stock, par value $0.001 per share, at a price per share of the lower of (a) the closing price for the Company's common stock on Nasdaq on the date immediately prior to the closing of the transaction and (b) the average closing price over the five business days prior to the closing of the transaction, in exchange for CRG surrendering for cancellation $15.0 million of outstanding borrowing under the Term Loan Agreement. The closing of the transaction was conditioned on the approval of the Company's stockholders at a stockholder meeting held on April 11, 2024 and was expected to occur within 10 business days following the approval of the Company's stockholders.

On April 11, 2024, the Company's stockholders voted for the approval of the conversion of $15.0 million of its Term Loan Agreement with CRG into equity. On April 12, 2024, the Company issued an aggregate of 3,280,618 shares of Common Stock and an aggregate of 17,160.48 shares of Series A Convertible Preferred Stock, par value $0.001 per share to CRG in exchange for the cancellation of $15.0 million of outstanding loans under the Term Loan Agreement. Each share of Series A Convertible Preferred Stock is convertible into 100 shares of our common stock at the holder's election following issuance, subject to beneficial ownership limitations.

Related Party

Upon the close of the July 2023 transaction in which CRG canceled $10.0 million of the Term Loan's principal in exchange for 483,457 shares of common stock and 93,297 shares of Series B Convertible Preferred Stock, CRG became a holder of more than ten percent of our common stock outstanding, and therefore determined to be a principal owner and related party. As of December 31, 2023, CRG held no shares of common stock and 93,297 shares of Series B Convertible Preferred Stock, which was convertible into more than ten percent of our common stock outstanding as of December 31, 2023. In February 2024, CRG converted 82,422 shares of its Series B Preferred Stock into 824,220 shares of common stock, which represented more than ten percent of our common stock outstanding. As of March 31, 2024, CRG held 824,220 shares of common stock which represented more than ten percent of our common stock outstanding as of March 31, 2024. As of March 31, 2024, CRG held 10,875 shares of Series B Preferred Stock which was convertible into 108,750 shares of common stock.

Classification

The Term Loan Agreement with CRG was classified as a current liability on both March 31, 2024 and December 31, 2023. In May 2023, the Company received a modification and waiver reducing the Term Loan's minimum cash covenant from $5.0 million to $500,000 until December 31, 2023. In addition, in October 2023, the interest-only period and maturity of the Term Loan were extended to December 31, 2025, and the $500,000 liquidity covenant was made permanent. Because management believes it is probable that the Company will not be able to comply with the covenant unless additional funds are raised, the Company concluded that the Term Loan and related liabilities should be classified as current on the condensed consolidated balance sheets.

Future Payments

Future principal payments on the notes payable are as follows (in thousands):

	March 31, 2024	December 31, 2023
Term Loan Agreement due 2025 including PIK interest, before unamortized discount and issuance costs	$ 44,457	$ 44,457
Less: unaccrued paid-in-kind interest	(2,670)	(3,037)
Less: unamortized discount and deferred issuance costs	(121)	(136)
Total notes payable to related party	$ 41,666	$ 41,284

7. Preferred Stock

Series A Redeemable Preferred Stock

On July 5, 2023, the Company issued Series A Redeemable Preferred Stock (the "Series A Preferred Stock") to help effect a Reverse Stock Split Proposal. Subject to the terms and conditions of a Securities Purchase Agreement, the Company agreed to issue and sell to CRG 1,000 shares of newly designated Series A Preferred Stock, par value $0.001 per share, for a total purchase price of $100.00. A "Reverse Stock Split Proposal" means any proposal approved by the Company's Board of Directors and submitted to the Company's

stockholders to adopt an amendment(s) to the Company's Amended and Restated Certificate of Incorporation to combine the outstanding shares of common stock into a smaller number of shares of common stock at a ratio to be specified.

Voting Rights

Shares of the Series A Preferred Stock had the right to vote only on any Reverse Stock Split Proposal and as may have been required by law. The Series A Preferred Stock represented an aggregate of 400,000,000 votes, and CRG agreed to vote in the same proportion as shares of common stock of the Company were voted on any Reverse Stock Split Proposal.

Redemption

The Series A Preferred Stock were redeemable (i) at any time if such redemption was ordered by the Board of Directors in its sole discretion, automatically and effective on such time and date specified by the Board of Directors in its sole discretion, or (ii) automatically immediately following the approval by the stockholders of the Company of a Reverse Stock Split Proposal at a redemption price of $100.00. On September 15, 2023, the Company's stockholders voted to approve an amendment to the Company's Amended and Restated Certificate of Incorporation to effect a reverse stock split of the Company's common stock, par value $0.001 per share, at a reverse split ratio ranging from any whole number between and including 1-for-50 and 1-for-150, with the exact ratio to be determined at the discretion of the Board of Directors of the Company. As a result of that stockholder vote, the Series A Preferred Stock was redeemed on September 15, 2023, for $100. Upon its redemption, the Company's Series A Preferred Stock ceased to be outstanding.

Series B Convertible Preferred Stock

On July 3, 2023, in conjunction with an agreement it reached with CRG to cancel $10.0 million of its Term Loan principal, the Company issued to CRG (i) an aggregate of 483,457 shares of common stock at a purchase price of $7.06 per share for a total purchase price of $3.4 million, and (ii) an aggregate of 93,297 shares of newly designated Series B Convertible Preferred Stock (the "Series B Preferred Stock"), par value $0.001 per share, at a purchase price of $70.60 per share (the "Stated Value") for a total purchase price of $6.6 million.

Dividends

Holders of Series B Preferred Stock are entitled to receive dividends on such shares (other than common stock dividends) equal (on an as-if-converted-to-common-stock basis) to and in the same form as dividends actually paid on shares of the common stock when, as and if such dividends are paid on shares of the common stock. No other dividends shall be paid on shares of Series B Preferred Stock. All declared but unpaid dividends on shares of Series B Preferred Stock will increase the Stated Value of such shares, but when such dividends are actually paid any such increase in the Stated Value will be rescinded.

Voting Rights

Except as may be required by law, the Series B Preferred Stock has no voting rights. However, as long as any shares of Series B Preferred Stock are outstanding, the Company shall not, without the affirmative vote of the holders of a majority of the then outstanding shares of the Series B Preferred Stock, (i) alter or change adversely the powers, preferences or rights given to the Series B Preferred Stock, (ii) increase or decrease (other than by conversion) the number of authorized shares of Series B Preferred Stock, or (iii) enter into any agreement with respect to any of the foregoing.

Liquidation Preference

The Series B Preferred Stock ranks (i) senior to any class or series of capital stock of the Corporation hereafter created specifically ranking by its terms junior to any Series B Preferred Stock (collectively, the "Junior Securities"); (ii) on parity with the common stock; (iii) on parity with any class or series of capital stock of the Company hereafter created specifically ranking by its terms on parity with the Series B Preferred Stock (together with the common stock, the "Parity Securities"); and (iv) junior to any class or series of capital stock of the Company hereafter created specifically ranking by its terms senior to any Series B Preferred Stock ("Senior Securities"), in each case, as to distributions of assets upon liquidation, dissolution or winding up of the Company, whether voluntarily or involuntarily (a "Liquidation"). No Junior Securities, Parity Securities or Senior Securities existed at March 31, 2024.

In a Liquidation, the Series B Preferred Stockholder will, subject to the prior and superior rights of the holders of any Senior Securities, be entitled to receive, in preference to any distributions of any of the assets or surplus funds of the Company to the holders of the Junior Securities and pari passu with any distribution to the holders of Parity Securities, an equivalent amount of any distributions as would be paid on the common stock underlying the Series B Preferred Stock, determined on an as-converted basis (without regard to

any limitations on conversion), plus an additional amount equal to any dividends declared but unpaid on such shares, before any payments shall be made or any assets distributed to holders of any class of Junior Securities.

Conversion Rights

Each share of Series B Preferred Stock is convertible, at any time and from time to time from and after the Reverse Split Amendment has been filed with the Secretary of State of the State of Delaware, at the option of the holder thereof, into a number of shares of common stock equal to the product of the Conversion Ratio (which is the $70.60 Stated Value of such shares divided by the $7.06 Conversion Price, subject to adjustment) and the number of shares of Series B Preferred Stock to be converted. The Reverse Split Amendment was filed on October 12, 2023. The conversion feature is subject to certain beneficial ownership limitations. The Conversion Price also is subject to adjustment for stock dividends and stock splits.

In February 2024, CRG converted 82,422 shares of its Series B Preferred Stock into 824,220 shares of common stock.

8. Warrants

Series A Warrant

On August 15, 2022, the Company issued an aggregate of 3,000 shares of Series A Redeemable Convertible Preferred Stock with a par value of $0.001 per share and the Series A Warrant to purchase up to an aggregate of 428 shares of common stock of the Company at an exercise price of $750.00 per share (such number of shares and exercise price are adjusted for the reverse stock split described in Note 2) for an aggregate subscription amount equal to $0.3 million, before deducting estimated offering expenses payable by the Company. In the fourth quarter of 2022, the Series A Redeemable Convertible Preferred Stock was redeemed. The Series A Warrant became exercisable on February 15, 2023 and expires on February 15, 2028. The Series A Warrant contains certain anti-dilution provisions to protect the holder.

On February 17, 2023, the Company issued and sold shares of common stock, pre-funded warrants to purchase common stock and warrants to purchase common stock to an underwriter pursuant to an underwriting agreement (see discussion below). The terms of that offering triggered an adjustment to the exercise price of the Series A Warrant to $54.00 effective as of February 17, 2023.

The Company is required to measure the Series A Warrant at fair value at inception and in subsequent reporting periods with changes in fair value recognized in change in fair value of warrant liabilities in the period of change in the condensed consolidated statements of operations and comprehensive loss. The fair value of the liability related to the Series A Warrant at inception was $0.4 million. The Series A Warrant was not exercised as of March 31, 2024 and remains outstanding. The change in fair value during the three months ended March 31, 2024 was immaterial.

Pre-Funded Warrants and Common Stock Warrants

On February 17, 2023, the Company sold 90,185 shares of $0.001 par value common stock, 20,925 Pre-Funded Warrants and 222,222 Common Stock Warrants through an offering underwritten by Craig-Hallum Capital Group LLC. Each of the shares and Pre-Funded Warrants were sold in combination with an accompanying Common Stock Warrant to purchase two shares of the Company's common stock. The combined purchase price for each share and accompanying Common Stock Warrant is $108.00, and for each Pre-Funded Warrant and accompanying Common Stock Warrant is $107.90, which was equal to the combined purchase price for each share and accompanying Common Stock Warrant sold in the offering, minus the Pre-Funded Warrant's exercise price per share of $0.10.

The total proceeds of $12.0 million from the February 17, 2023 offering were allocated between the common stock, Pre-Funded Warrants and Common Stock Warrants. Because the Common Stock Warrants are liability-classified, an amount of proceeds equal to the fair value of the liability were first allocated to the Common Stock Warrants. The remaining proceeds were allocated on a relative fair value basis to the common stock and the Pre-Funded Warrants and recognized in additional paid-in capital. Total issuance costs related to the offering of $1.1 million were allocated in a similar manner as the total proceeds. As a result, approximately $0.7 million of issuance costs were expensed at the issuance date and recognized as Other, net in the condensed consolidated statements of operations and comprehensive loss. The remaining issuance costs were recognized within additional paid-in-capital as a reduction to the proceeds received for the common stock and Pre-Funded Warrants.

The Pre-Funded Warrants had (i) an exercise price per share of common stock equal to $0.10 or (ii) a cashless exercise option, with the number of shares received determined according to the formula set forth in the Pre-Funded Warrant. The Pre-Funded Warrants were exercisable upon issuance and did not expire. The exercise price and the number of shares of common stock issuable upon exercise of the Pre-Funded Warrants was subject to adjustment in the event of certain stock dividends and distributions, splits, combinations, reclassifications or similar events affecting the common stock. Holders of Pre-Funded Warrants participated in any distributions to common stockholders as if the holders had exercised the Pre-Funded Warrants.

The Company determined that the Pre-Funded Warrants were indexed to the Company's own stock and met the requirements for equity classification. Proceeds allocated to such warrants totaled $0.8 million. No Pre-Funded Warrants remain outstanding on March 31, 2024.

The Common Stock Warrants have (i) an exercise price per share of common stock equal to $108.00 per share, (ii) a cashless exercise option if, at the time of exercise, there is no effective registration statement registering or the prospectus is not available for the issuance of the warrant shares to the holder, with the number of shares received determined according to the formula set forth in the Common Stock Warrant or (iii) an alternate cashless exercise option, which became exercisable on March 15, 2023, equal to the product of (x) the aggregate number of shares of common stock that would be issuable upon a cash exercise and (y) 0.5. The Common Stock Warrants are exercisable upon issuance and expire on February 17, 2028. The exercise price and the number of shares of common stock issuable upon exercise of the Common Stock Warrants is subject to adjustment in the event of certain stock dividends and distributions, splits, combinations, reclassifications or similar events affecting the common stock. Holders of the Common Stock Warrants will participate in any distributions to common stockholders as if the holders had exercised the Common Stock Warrants. The Common Stock Warrants are redeemable upon the occurrence of a Fundamental Transaction (as defined in the Common Stock Purchase Warrant Agreement).

The Company determined that the Common Stock Warrants are not indexed to the Company's own stock and therefore are precluded from equity classification. In addition, the Common Stock Warrant liability meets the definition of a derivative instrument. The Common Stock Warrants will be measured at fair value at inception and in subsequent reporting periods with changes in fair value recognized in income as change in fair value of warrant liabilities in the period of change in the condensed consolidated statements of operations and comprehensive loss. The fair value of the Common Stock Warrant liability at inception was $7.6 million. During the three months ended March 31, 2024, no Common Stock Warrants were exercised. On March 31, 2024, 66,665 Common Stock Warrants remain outstanding. The change in fair value after issuance consisted of a reduction of expense of $0.1 million during the three months ended March 31, 2024.

The Company has also issued certain warrants in conjunction with its Term Loan Agreement. See Note 6.

9. Stockholders' Deficit

Preferred Stock

The Company has authorized the issuance of up to 10,000,000 shares of $0.001 par value preferred stock. The Board of Directors will determine the preferred stock's rights, preferences, privileges, restrictions, voting rights, dividend rights, conversion rights, redemption privileges, and liquidation preferences.

Common Stock

The Company has authorized the issuance of 400,000,000 shares of $0.001 par value common stock. Each share of common stock is entitled to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when declared by the Board of Directors, subject to the prior rights of holders of all classes of stock outstanding. As of March 31, 2024, a total of 1,532 shares, 8,295 shares, and 67,311 shares of common stock were reserved for issuance upon (i) the exercise of outstanding stock options, (ii) the issuance of stock awards, and (iii) the exercise of warrants, respectively, under the Company's 2014 Incentive Award Plan, Inducement Award Plan and 2014 Employee Stock Purchase Plan.

Equity Distribution Agreement

On March 31, 2021, the Company entered into an Equity Distribution Agreement (the "Equity Distribution Agreement") with Canaccord Genuity LLC ("Canaccord"), through which the Company may sell up to $75.0 million of gross proceeds of common stock. In July 2023, the Company filed an amendment to the prospectus supplement relating to the offer and sale of shares under the Equity Distribution Agreement to increase the maximum amount of shares that the Company may sell pursuant to its Equity Distribution Agreement with Canaccord by $65 million. At the time of the amendment, the Company had sold shares of its common stock for gross proceeds of $71.3 million.

Canaccord, as agent, sells shares at the Company's request through "at the market" offerings, subject to shelf limitations, in negotiated transactions at market prices prevailing at the time of sale or at prices related to such prevailing market prices, or by any other method permitted by law, including negotiated transactions. Canaccord receives a fee of 3% of gross proceeds of common stock sold under the Equity Distribution Agreement for its services. Legal and accounting fees from sales under the Equity Distribution Agreement are charged to share capital. Under the Equity Distribution Agreement, the Company sold 628,470 shares of common stock during the three months ended March 31, 2024 for net proceeds of $2.2 million, and 6,528 shares of common stock during the three months ended March 31, 2023 for net proceeds of $0.9 million.

10. Stock-Based Compensation

Stock Incentive Plans

2006 Stock Incentive Plan

The Company's Amended and Restated 2006 Employee, Director and Consultant Stock Plan (the "2006 Plan") was established for granting stock incentive awards to directors, officers, employees and consultants of the Company. Upon closing of the Company's IPO in August 2014, the Company ceased granting stock incentive awards under the 2006 Plan. The 2006 Plan provided for the grant of incentive and non-qualified stock options and restricted stock grants as determined by the Company's Board of Directors. Under the 2006 Plan, stock options were generally granted with exercise prices equal to or greater than the fair value of the common stock as determined by the Board of Directors, expired no later than 10 years from the date of grant, and vest over various periods not exceeding 4 years.

2014 Stock Incentive Plan

The Company's 2014 Incentive Award Plan (the "2014 Plan," and together with the 2006 Plan, the "Stock Incentive Plans"), which was amended and restated in October 2023, provides for the issuance of shares of common stock in the form of stock options, awards of restricted stock, awards of restricted stock units, performance awards, dividend equivalent awards, stock payment awards and stock appreciation rights to directors, officers, employees and consultants of the Company. Since the establishment of the 2014 Plan, the Company has primarily granted stock options and restricted stock units. Generally, stock options are granted with exercise prices equal to or greater than the fair value of the common stock on the date of grant, expire no later than 10 years from the date of grant, and vest over various periods not exceeding 4 years.

The number of shares reserved for future issuance under the 2014 Plan is the sum of (1) 823,529 shares, (2) any shares that were granted under the 2006 Plan which are forfeited, lapse unexercised or are settled in cash subsequent to the effective date of the 2014 Plan and (3) an annual increase on the first day of each calendar year, beginning January 1, 2015 and ending on and including January 1, 2026, equal to the lesser of (A) 4% of the shares outstanding (on an as-converted basis) on the final day of the immediately preceding calendar year and (B) such smaller number of shares determined by the Company's Board of Directors; provided, however, no more than 35 million shares may be issued upon the exercise of incentive stock options. As of March 31, 2024, there were 981,723 shares available for future grant under the 2014 Plan.

Inducement Award Plan

The Company's Inducement Award Plan (the "Inducement Plan"), which was adopted in March 2018 without stockholder approval pursuant to Rule 5635(c)(4) of the Nasdaq listing rules ("Rule 5635(c)(4)") and most recently amended and restated in February 2023, provides for the grant of equity awards to new employees, including options, restricted stock awards, restricted stock units, performance awards, dividend equivalent awards, stock payment awards and stock appreciation rights. In accordance with Rule 5635(c)(4), awards under the Inducement Plan may only be made to a newly hired employee who has not previously been a member of the Company's Board of Directors, or an employee who is being rehired following a bona fide period of non-employment by us as a material inducement to the employee's entering into employment with us. The aggregate number of shares of common stock which may be issued or transferred pursuant to awards under the Inducement Plan is 6,925 shares. Any awards that forfeit, expire, lapse, or are settled for cash without the delivery of shares to the holder are available for the grant of an award under the Inducement Plan. Any shares repurchased by or surrendered to the Company that are returned shall be available for the grant of an award under the Inducement Plan. The payment of dividend equivalents in cash in conjunction with any outstanding award shall not be counted against the shares available for issuance under the Inducement Plan. As of March 31, 2024, there were 5,061 shares available for future grant under the Inducement Plan.

Stock Options

There were no stock options granted in the three months ended March 31, 2024. The aggregate fair value of stock options granted during the three months ended March 31, 2023 was immaterial and is being amortized into compensation expense over the vesting period of the options as the services are being provided.

The following is a summary of option activity under the Stock Incentive Plans and Inducement Plan (in thousands, except term, share and per share amounts):

	Number of Shares	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (In years)	Aggregate Intrinsic Value
Outstanding on December 31, 2023	1,573	$ 12,371.09	6.08	$ —
Granted	—	—		
Exercised	—	—		
Forfeited	(23)	1,591.63		
Cancelled	(18)	10,374.44		
Outstanding on March 31, 2024	1,532	$ 12,556.38	5.72	$ —
Exercisable on March 31, 2024	1,258	$ 15,062.76	5.03	$ —
Vested or expected to vest on March 31, 2024	1,466	$ 13,091.28	5.57	$ —

There were no options exercised in the three months ended March 31, 2024 and 2023. There were no stock options granted in the three months ended March 31, 2024. The weighted-average grant date fair values of stock options granted in the three months ended March 31, 2023 was $134.00 per share and were calculated using the following estimated assumptions:

	Three Months Ended March 31,	
	2024	2023
Weighted-average risk-free interest rate	—	3.65%
Expected dividend yield	—	—%
Expected volatility	—	111%
Expected terms	—	6.0 years

The total fair values of stock options that vested during the three months ended March 31, 2024 and 2023 were $0.1 million and $0.3 million, respectively.

As of March 31, 2024, there was $0.2 million of total unrecognized compensation cost related to non-vested stock options granted under the Stock Incentive Plans and Inducement Plan. Total unrecognized compensation cost will be adjusted for future changes in the estimated forfeiture rate. The Company expects to recognize that cost over a remaining weighted-average period of 1.3 years as of March 31, 2024.

Restricted Stock Units

During the three months ended March 31, 2024, the Company awarded restricted stock units to certain employees and directors at no cost to them. The restricted stock units, excluding any restricted stock units with market conditions, vest through the passage of time, assuming continued service. Restricted stock units are not included in issued and outstanding common stock until the underlying shares are vested and released. The fair value of the restricted stock units, at the time of the grant, is expensed on a straight-line basis. The granted restricted stock units had an aggregate fair value of less than $0.1 million, which are being amortized into compensation expense over the vesting period of the restricted stock units as the services are being provided.

The following is a summary of restricted stock unit activity under the 2014 Plan and Inducement Plan:

	Number of Shares	Weighted-Average Grant Date Fair Value Per Share
Nonvested on December 31, 2023	3,691	$ 1,202.65
Granted	6,369	6.28
Vested	(1,549)	2,175.68
Forfeited	(216)	196.75
Nonvested on March 31, 2024	8,295	$ 127.45

As of March 31, 2024, there was $0.9 million of total unrecognized compensation cost related to nonvested restricted stock units granted. Total unrecognized compensation cost will be adjusted for future changes in the estimated forfeiture rate. The Company expects to recognize that cost over a remaining weighted-average period of 0.9 years, as of March 31, 2024.

Employee Stock Purchase Plan

Under the 2014 Employee Stock Purchase Plan (the "2014 ESPP") participants may purchase the Company's common stock during semi-annual offering periods at 85% of the lower of (i) the market value per share of common stock on the first day of the offering period or (ii) the market value per share of the common stock on the purchase date. Each participant can purchase up to a maximum of $25,000 per calendar year in fair market value as calculated in accordance with applicable tax rules. The first offering period began on August 7, 2014. Stock-based compensation expense from the 2014 ESPP was immaterial for both the three months ended March 31, 2024 and 2023.

The 2014 ESPP, which was amended and restated effective October 2023, provides for the issuance of up to 400,000 shares of the Company's common stock to eligible employees. On March 31, 2024, there were 394,477 shares available for issuance under the 2014 ESPP.

Stock-Based Compensation Expense

The following table summarizes the stock-based compensation expense resulting from awards granted under Stock Incentive Plans, the Inducement Plan and the 2014 ESPP, that was recorded in the Company's results of operations for the periods presented (in thousands):

	Three Months Ended March 31,	
	2024	2023
Cost of product revenue	$ 35	$ 54
Research and development	249	280
Selling, general and administrative	1,296	1,462
Total stock-based compensation expense	$ 1,580	$ 1,796

For the three months ended March 31, 2024 and 2023, stock-based compensation expense capitalized as part of inventory or T2-owned instruments and components was immaterial.

11. Net Loss Per Share

The Company applies the two-class method for computing earnings per share because its Series A Warrants, Pre-Funded Warrants and Common Stock Warrants are participating securities. Because the Company incurred a net loss for the three months ended March 31, 2024 and 2023, and the holders of the participating securities do not have the contractual obligation to share in the losses of the Company, none of the net loss attributable to common stockholders was allocated to the participating securities when computing earnings per share. The basic and diluted net loss per share calculation includes the Series B Convertible Preferred Shares, on an if-converted basis, given that these instruments have essentially the same economic rights and privileges as the currently outstanding common stock.

The Pre-Funded Warrants allowed the holders to acquire a specified number of common shares at a nominal exercise price of $0.10 per share and were classified as equity. Since the shares underlying the Pre-Funded Warrants were exercisable for little or no consideration, the underlying shares were considered outstanding at the issuance of the Pre-Funded Warrants for purposes of calculating the weighted-average number of shares of common stock outstanding in basic and diluted earnings per share for common stock. At March 31, 2024, none of the Pre-Funded Warrants were outstanding.

The following shares were excluded from the calculation of diluted net loss per share applicable to common stockholders, prior to the application of the treasury stock or if-converted methods, because their effect would have been anti-dilutive for the periods presented:

	Three Months Ended March 31,	
	2024	2023
Options to purchase common shares	1,532	1,674
Restricted stock units	8,295	4,699
Term Loan Warrants	218	218
Series A Warrant	428	428
Common Stock Warrants	66,665	198,781
Total	77,138	205,800

Note that all net loss per share computations for all periods presented reflect the changes in the number of shares resulting from the 1-for-100 reverse stock split that was approved by shareholders on September 15, 2023 and became effective as of October 12, 2023.

12. U.S. Government Contract

In September 2019, BARDA awarded the Company a milestone-based product development contract, with an initial value of $6.0 million, and a potential value of up to $69.0 million, which was amended with Option 3 to $62.0 million due to a change in scope, if BARDA exercises all contract options (the "U.S. Government Contract"). BARDA operates within the Office of the Assistant Secretary for Preparedness and Response ("ASPR") at the U.S. Department of Health and Human Services ("HHS"). If BARDA exercises and the Company completes all options, the Company's management believes it will enable a significant expansion of the Company's current portfolio of diagnostics for sepsis-causing pathogen and antibiotic resistance genes. In September 2020, BARDA exercised the first contract option valued at $10.5 million. In September 2021, BARDA exercised an option valued at approximately $6.4 million.

In April 2021, BARDA agreed to accelerate product development by modifying the contract to advance future deliverables into the currently funded Option 1 of the BARDA contract for the T2Biothreat Panel and the T2Resistance Panel. The modification did not change the overall total potential value of the BARDA contract.

On March 31, 2022, the Company announced that BARDA had exercised Option 2B under the existing multiple-year cost-share contract between BARDA and the Company and provided an additional $4.4 million in funding to the Company.

The option exercise occurred simultaneously on March 31, 2022 with a modification to the BARDA contract to make immaterial changes to, among other things, the statement of work.

In September 2022, BARDA exercised Option 3 and agreed to provide an additional $3.7 million in funding for the multiple-year cost-share contract. The additional funding under Option 3 was used to advance the U.S. clinical trials for the T2Biothreat Panel and T2Resistance Panel, and to file submissions to the FDA for U.S. regulatory clearance.

The Company recorded no contribution revenue for the three months ended March 31, 2024 and $0.4 million of contribution revenue for the three months ended March 31, 2023 under the BARDA contract.

The Company had no outstanding accounts receivable on March 31, 2024 and December 31, 2023 under the BARDA contract.

The BARDA contract expired in September 2023.

13. Leases

Operating Leases

The Company leases certain office space, laboratory space and equipment. At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the unique facts and circumstances present. The Company does not recognize right-of-use assets or lease liabilities for leases determined to have a term of 12 months or less. The Company has elected to account for the lease and associated non-lease components as a combined lease component.

In August 2010, the Company entered into an operating lease for office and laboratory space at its headquarters in Lexington, Massachusetts. The lease commenced in January 2011, with the Company providing a security deposit of $400,000. In accordance with the operating lease agreement, the Company reduced its security deposit to $160,000 in January 2018, which is recorded as restricted cash in the condensed consolidated balance sheets. In March 2017, the Company entered into an amendment to extend the term to December 2021. In October 2020, the Company entered into an amendment to extend the term to December 31, 2028. In accordance with the October 2020 amendment, the Company increased its security deposit to $420,438, which is classified as restricted cash on March 31, 2024 and December 31, 2023.

In May 2013, the Company entered into an operating lease for additional office, laboratory and manufacturing space in Wilmington, Massachusetts. In August 2018, the Company entered into an amendment to extend the term to December 2020. In October 2020, the Company entered into an amendment to extend the term to December 31, 2022. In September 2022, the Company entered into an amendment to extend the term to December 31, 2024.

In November 2014, the Company entered into a lease for additional laboratory space in Lexington, Massachusetts. The lease term commenced in April 2015 and extended for six years. The rent expense, inclusive of the escalating rent payments, is recognized on a

straight-line basis over the lease term. As an incentive to enter into the lease, the landlord paid approximately $1.4 million of the $2.2 million space build-out costs. The unamortized balance of the lease incentive as of January 1, 2019 was reclassified as a reduction to the initial recognition of the right-of-use asset related to this lease. In connection with this lease agreement, the Company paid a security deposit of $281,000, which was recorded as a component of both prepaid expenses and other current assets and other assets in the condensed consolidated balance sheets on December 31, 2019. In October 2020, the Company entered into an amendment to extend the term of the lease to October 31, 2025. In accordance with this amendment, the Company paid a replacement security deposit of $130,977, which is classified as restricted cash on March 31, 2024 and December 31, 2023 and received the initial $281,000 security deposit in return.

In September 2021, the Company entered into a lease for office, research, laboratory and manufacturing space in Billerica, Massachusetts. The lease had a term of 126 months from the commencement date. The Company opened a money market account for $1.0 million, which represented collateral as a security deposit for this lease and was classified as restricted cash on December 31, 2022. Occupancy of the building had been delayed due to disagreement between the Company and the landlord as to the parties' obligations under the lease agreement. Included within accrued expenses and other current liabilities on the balance sheet on December 31, 2022 was a $1.0 million estimated liability pertaining to this lease. In January 2023, the Company was notified that the landlord terminated the lease because of the Company's alleged failure to perform its obligations under the Lease in a timely manner and the Company's alleged breach of the covenant of good faith and fair dealing and exercised its right to draw upon the $1.0 million security deposit. In addition, the landlord is seeking damages for unpaid rent, brokerage fees, transaction costs, attorney's fees and court costs. The Company filed a response to the landlord's complaint and a counterclaim alleging that the landlord breached its obligations under the contract and unlawfully drew on the security deposit, in addition to breaching its covenants of good faith and fair dealing, making fraudulent misrepresentations, and engaging in deceptive and unfair trade practices. The matter is in dispute (Note 14). The Company intends to pursue legal remedies available under applicable laws. The Company believes it will continue to meet its current manufacturing needs with its operations at its Lexington and Wilmington, Massachusetts facilities.

Operating leases are amortized over the lease term and included in costs and expenses in the condensed consolidated statement of operations and comprehensive loss. Variable lease costs are recognized in costs and expenses in the condensed consolidated statement of operations and comprehensive loss as incurred. Variable lease costs may include costs such as common area maintenance, utilities, real estate taxes or other costs. Expenses related to short-term leases were not material for the periods presented.

14. Commitments and Contingencies

Contingencies

In September 2021, the Company entered into a lease for office, research, laboratory and manufacturing space in Billerica, Massachusetts. The lease had a term of 126 months from the commencement date. The Company opened a money market account for $1.0 million, which represented collateral as a security deposit for this lease and was classified as restricted cash on December 31, 2022. Occupancy of the building had been delayed due to disagreement between the Company and the landlord as to the parties' obligations under the lease agreement. Included within accrued expenses and other current liabilities on the balance sheet on December 31, 2022 was a $1.0 million estimated liability pertaining to this lease. In January 2023, the Company was notified that the landlord terminated the lease because of the Company's alleged failure to perform its obligations under the Lease in a timely manner and the Company's alleged breach of the covenant of good faith and fair dealing and exercised its right to draw upon the $1.0 million security deposit. In addition, the landlord is seeking damages for unpaid rent, brokerage fees, transaction costs, attorney's fees and court costs. The Company filed a response to the landlord's complaint and a counterclaim alleging that the landlord breached its obligations under the contract and unlawfully drew on the security deposit, in addition to breaching its covenants of good faith and fair dealing, making fraudulent misrepresentations, and engaging in deceptive and unfair trade practices. The Company intends to pursue legal remedies available under applicable laws. The Company believes it will continue to meet its current manufacturing needs with its operations at its Lexington and Wilmington, Massachusetts facilities.

License Agreement

In 2006, the Company entered into a license agreement with a third party, pursuant to which the third party granted the Company an exclusive, worldwide, sublicensable license under certain patent rights to make, use, import and commercialize products and processes for diagnostic, industrial and research and development purposes. The Company agreed to pay an annual license fee ranging from $5,000 to $25,000 for the royalty-bearing license to certain patents. The Company also issued a total of 16 shares of common stock pursuant to the agreement in 2006 and 2007, which were recorded at fair value at the date of issuance. The Company is required to pay royalties on net sales of products and processes that are covered by patent rights licensed under the agreement at a percentage ranging between 0.5% - 3.5%, subject to reductions and offsets in certain circumstances, as well as a royalty on net sales of products that the Company sublicenses at 10% of specified gross revenue. Royalties that became due under this agreement for the three months ended March 31, 2024, and 2023 were immaterial.

Letter Agreements

On March 31, 2024, the Company entered into letter agreements with Mr. Sprague and Mr. Gibbs that provide for the payment of a retention bonus in the total aggregate amount of $80,000, to be paid in two installments of $40,000. The first installment, in the amount of $40,000, shall be paid within five business days following June 30, 2024, and the second installment, in the amount of $40,000, shall be paid within five business days following November 15, 2024. Each such installment payment is subject to the applicable executive's continued employment through such payment date.

On March 30, 2023, the Company entered into agreements with Mr. Sprague, Mr. Giffin, and Mr. Gibbs that provide for the payment of retention bonuses, subject to the respective executive's continued employment through such payment dates, of $80,000 each, to be paid in two installments of $40,000. The first installment, of $40,000 each, was paid in July 2023, and the second installment, of $40,000 each, was paid in November 2023.

15. Subsequent Events

Issuances of Equity to CRG

On April 11, 2024, the Company's stockholders voted for the approval of the conversion of $15.0 million of its Term Loan Agreement with CRG into equity. On April 12, 2024, the Company issued an aggregate of 3,280,618 shares of Common Stock and an aggregate of 17,160.48 shares of Series A Convertible Preferred Stock, par value $0.001 per share (the "Series A Convertible Preferred Stock") to CRG in exchange for the cancellation of $15.0 million of outstanding loans under the Term Loan Agreement (the "Exchange"). The Exchange was completed pursuant to the Securities Purchase Agreement (the "Securities Purchase Agreement"), dated as of February 15, 2024, with CRG. Each share of Series A Convertible Preferred Stock is convertible into 100 shares of our common stock at the holder's election following issuance, subject to beneficial ownership limitations.

On May 3, 2024, the Company entered into a Securities Purchase Agreement (the "May SPA") with CRG pursuant to which the Company will issue to CRG in a private placement offering 4,748,335 shares of the Company's common stock in exchange for the cancellation of $15.0 million of outstanding loans under the Term Loan Agreement (the "May Exchange").

Consents and Amendments to Term Loan Agreement

On April 12, 2024, the Company entered into a Consent and Amendment No. 10 to the Term Loan Agreement (the "Consent"). The Consent provides for, among other things, (i) the consent of the Administrative Agent and CRG to the Exchange and (ii) the extension of the period in which the Company may elect to pay a portion of the accrued interest on the term loans in-kind to the earlier of (a) December 31, 2025 and (b) the date on which a default has occurred.

On May 3, 2024, the Company entered into a Consent and Amendment No. 11 to the Term Loan Agreement ("Consent No. 11"). Consent No. 11 provides for, among other things, (i) the consent of the Administrative Agent and CRG to the May Exchange and (ii) an amendment to the "Change of Control" definition to allow CRG or their affiliates to acquire a majority of shares in the Company without causing a Change of Control under the Term Loan Agreement.

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

This Quarterly Report on Form 10-Q contains forward-looking statements about us and our industry within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. We intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934, or the Exchange Act. All statements other than statements of historical facts contained in this Quarterly Report on Form 10-Q, including, without limitation, statements regarding our future results of operations and financial position, business strategy, prospective products and product candidates, their expected performance and impact on healthcare costs, marketing clearance from the U.S. Food and Drug Administration ("FDA"), reimbursement for our product candidates, research and development costs, timing of regulatory filings, timing and likelihood of success, plans and objectives of management for future operations, availability of raw materials and components for our products, availability of funding for such operations and future results of anticipated products, are forward-looking statements. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements are subject to numerous risks, including, without limitation, the following:

- *our ability to continue as a going concern;*
- *our ability to regain and maintain compliance with Nasdaq listing requirements;*
- *our expectation that we will incur losses in the future and be unable to utilize limited net operating losses against future profitability, if any;*
- *compliance with the terms of our debt instruments;*
- *our future capital needs and our ability to raise additional funds;*
- *the impact of litigation, including our ability to adequately resolve current legal claims;*
- *our status as an early-stage commercial company;*
- *the market acceptance of our technology;*
- *our ability to timely and successfully develop and commercialize our existing products and future product candidates;*
- *the length and variability of our anticipated sales and adoption cycle;*
- *our ability to gain the support of hospitals and key thought leaders and publish the results of our clinical studies in peer-reviewed journals;*
- *our ability to successfully manage our growth;*
- *fluctuations in demand for, and prices of, raw materials and other supplies;*
- *our ability to recruit, train and retain key personnel;*
- *the performance of our diagnostics;*
- *our ability to compete in the highly competitive diagnostics market;*
- *manufacturing and other product risks, including unforeseen interruptions in the manufacturing of our products and backlogs in order fulfillment;*
- *our dependence on third parties;*
- *the impact of cybersecurity risks, including ransomware, phishing, and data breaches on our information technology systems;*
- *our ability to obtain marketing clearance from the U.S. Food and Drug Administration or regulatory clearance or certifications for new product candidates in other jurisdictions, including IVDR in the European Union;*
- *federal, state, and foreign regulatory requirements, including diagnostic product reimbursements and FDA regulation of our products and product candidates;*

- *our ability to protect and enforce our intellectual property rights, including our trade secret-protected proprietary rights in our technology;*
- *an active trading market for our common stock;*
- *volatility of our stock price which may be impacted by shortsellers and day traders; and*
- *our ability to maintain an effective system of internal control over financial reporting.*

These forward-looking statements represent our estimates and assumptions only as of the date of this Quarterly Report on Form 10-Q. Unless required by U.S. federal securities laws, we do not intend to update any of these forward-looking statements to reflect circumstances or events that occur after the statement is made or to conform these statements to actual results. The following discussion should be read in conjunction with the financial statements and notes thereto appearing elsewhere in this Quarterly Report on Form 10-Q. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Quarterly Report on Form 10-Q, and Part I, Item 1A "Risk Factors" and Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2023, as updated by Part II, Item 1A—"Risk Factors" in this Quarterly Report on Form 10-Q.

You should read the following discussion and analysis of our financial condition and results of operations together with our condensed consolidated financial statements and related notes thereto included elsewhere in this Quarterly Report on Form 10-Q and the audited financial statements and notes thereto and Management's Discussion and Analysis of Financial Condition and Results of Operations included in our Annual Report on Form 10-K for the year ended December 31, 2023.

Business Overview

Overview

We are an in vitro diagnostics company and leader in the rapid detection of sepsis-causing pathogens and antibiotic resistance genes. Our technology enables rapid detection of pathogens, biomarkers and other abnormalities in a variety of unpurified patient sample types, including whole blood, plasma, serum, saliva, sputum and urine, and can detect cellular targets at limits of detection as low as one colony forming unit per milliliter, or CFU/mL. We are currently targeting what we believe to be a range of critically underserved healthcare conditions, focusing initially on those for which rapid detection may enable faster targeted antimicrobial treatment, improve patient outcomes, and reduce cost. Our current focus includes three areas – sepsis, bioterrorism, and Lyme disease – which we believe collectively represent a multi-billion dollar market opportunity.

Our primary commercial products include the T2Dx® Instrument, the T2Bacteria® Panel, the T2Candida® Panel, the T2Resistance® Panel, and the T2Biothreat™ Panel. Our sepsis products – including the T2Dx Instrument, the T2Bacteria Panel, and the T2Candida Panel – are FDA-cleared products able to detect sepsis-causing pathogens directly from blood. Where traditional diagnostics like blood cultures and post-culture diagnostics may take days to produce results, our products are designed to detect these pathogens in three to five hours. We believe our products provide a significant and sustainable competitive advantage compared to other products in our markets.

We have never been profitable and have incurred net losses in each year since inception. Our accumulated deficit on March 31, 2024 was $597.8 million and we have experienced cash outflows from operating activities since inception. Substantially all of our net losses resulted from costs incurred in connection with our research and development programs, from selling, general and administrative costs associated with our operations, and costs of product revenue. We have incurred significant commercialization expenses related to product sales, marketing, manufacturing and distribution of our FDA-cleared products, the T2Dx Instrument, T2Candida Panel, T2Bacteria Panel, and T2Biothreat Panel. In addition, we will continue to incur significant costs and expenses as we continue to develop other product candidates, improve existing products and maintain, expand and protect our intellectual property portfolio. We may seek to fund our operations through public equity or private equity or debt financings, as well as other sources. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. Our failure to raise capital or enter into such other arrangements if and when needed would have a negative impact on our business, results of operations and financial condition and our ability to develop, commercialize and drive adoption of the T2Dx Instrument and the T2Candida, T2Bacteria, T2Resistance, and T2Biothreat Panels and future products.

We are subject to a number of risks similar to other early commercial stage life science companies, including, but not limited to commercially launching our products, development and market acceptance of our product candidates, development by our competitors of new technological innovations, protection of proprietary technology, and raising additional capital.

We believe that our cash and cash equivalents of $6.2 million on March 31, 2024 will not be sufficient to fund our current operating plan through the third quarter of 2024. Certain elements of our operating plan cannot be considered probable, and in order to support our business we initiated a process to explore a range of strategic alternatives focused on maximizing value.

As part of our strategic restructuring program, we initiated a workforce reduction of nearly 30% in May 2023. Additionally, we are continuing to explore alternative strategic options, including an acquisition, merger, reverse merger, other business combination, sale of assets or licensing. We converted approximately 20% of our outstanding indebtedness into equity in July 2023 and a further approximately 35% in April 2024.

The Term Loan Agreement with CRG (See Note 6) has a minimum liquidity covenant which initially required us to maintain a minimum cash balance of $5.0 million. In May 2023, CRG reduced the minimum liquidity covenant under the Term Loan Agreement from $5.0 million to $500,000 until December 31, 2023. In July 2023, the Company also converted $10.0 million of the outstanding debt with CRG to equity. In October 2023, the Term Loan Agreement was amended to extend both the interest-only period and the maturity date by one year from December 30, 2024 to December 31, 2025, and permanently reduce the minimum liquidity covenant from $5.0 million to $500,000.

In September 2023, the Company's milestone-based product development contract with BARDA expired, which may impact the Company's ability to continue to fund the development of its next-generation products.

These conditions raise substantial doubt regarding our ability to continue as a going concern for a period of one year after the date that these financial statements are issued. Management's plans to alleviate the conditions that raise substantial doubt include raising additional funding, delaying certain research projects and capital expenditures and eliminating certain future operating expenses in order to fund operations at reduced levels for us to continue as a going concern for a period of 12 months from the date these financial statements are issued. Management has concluded the likelihood that its plan to successfully obtain sufficient funding from one or more of these sources or adequately reduce expenditures, while reasonably possible, is less than probable. Accordingly, we have concluded that substantial doubt exists about our ability to continue as a going concern for a period of at least 12 months from the date of issuance of these financial statements. See Part II, Item 1A—"Risk Factors" in this Quarterly Report on Form 10-Q.

Product History

In September 2014, we received marketing authorization from the United States Food and Drug Administration, or FDA, for our first two products, the T2Dx Instrument and the T2Candida Panel, or T2Candida. T2Candida, which runs on the T2Dx Instrument, has the ability to rapidly identify the five most clinically relevant species of *Candida*, a fungal pathogen known to cause sepsis, directly from blood specimens. The T2Dx Instrument and T2Candida were CE marked in the European Union, or the EU, in July 2014.

In May 2018, we received market clearance from the FDA for the T2Bacteria Panel, or T2Bacteria, which runs on the T2Dx Instrument and has the ability to rapidly identify six of the most common and deadly sepsis-causing bacteria directly from blood specimens. T2Bacteria was CE marked in the EU in June 2017.

In February 2019, our T2Resistance Panel, or T2Resistance, was granted FDA Breakthrough Device designation and, in November 2019, was CE marked in the EU. In December 2021, we initiated a U.S. clinical trial for T2Resistance. The clinical trial is expected to be completed in 2024, and we believe the data from this trial may enable submission of a marketing application to the FDA in 2024.

In September 2019, the Biomedical Advanced Research and Development Authority, or BARDA, an office of the U.S. Department of Health and Human Services, or HHS, awarded us a milestone-based contract for the development of a next-generation diagnostic instrument, a comprehensive sepsis panel and a multi-target biothreat panel. In September 2020, BARDA exercised the first contract option valued at $10.5 million. In April 2021, BARDA agreed to modify the contract to accelerate product development by advancing future deliverables and adding a U.S. T2Resistance Panel into Option 1 of the contract. In September 2021, BARDA exercised Option 2A valued at approximately $6.4 million to further advance the new product development initiatives. In December 2021, we initiated the U.S. clinical trials for T2Resistance and the T2Biothreat Panel, or T2Biothreat. In March 2022, BARDA exercised Option 2B valued at approximately $4.4 million. In May 2022, BARDA exercised Option 3 valued at approximately $3.7 million to complete the U.S. clinical trials for T2Resistance and T2Biothreat and subsequently submit applications to the FDA for U.S. regulatory clearance for those product candidates. In December 2022 the T2Biothreat clinical evaluation was completed. In May 2023, we submitted a 510(k) premarket notification to the FDA for T2Biothreat and in September 2023, we received 510(k) clearance from the FDA to market T2Biothreat. The BARDA contract expired in September 2023.

In June 2020, we launched a COVID-19 molecular diagnostic test, the T2SARS-CoV-2 Panel, or T2SARS-CoV-2, after validation of the test pursuant to the FDA's policy permitting COVID-19 tests to be marketed prior to receipt of an Emergency Use Authorization, or EUA, subject to certain prerequisites. In August 2020, the FDA granted an EUA to T2SARS-CoV-2 for the qualitative direct detection

of nucleic acid from SARS-CoV-2 in upper respiratory specimens and bronchoalveolar lavage specimens from individuals suspected of COVID-19 by their healthcare provider. We marketed and sold T2SARS-CoV-2 between 2020 and 2023, with peak sales occurring during 2021. In 2023, we experienced decreased demand for the product as the incidence of COVID-19 infections decreased significantly and, as a result, we have stopped marketing, selling and manufacturing T2SARS-CoV-2.

In July 2022, we received Breakthrough Device designation for the T2Lyme Panel, or T2Lyme, a direct-from-blood molecular diagnostic test designed to run on the T2Dx Instrument and detect *Borrelia burgdorferi*, the bacteria that cause Lyme disease. T2Lyme is intended to test individuals with signs and symptoms of Lyme disease and aid in the diagnosis of early Lyme disease. In November 2022, the HHS and the Steven & Alexandra Cohen Foundation, or Cohen Foundation, selected T2 Biosystems as a Phase 1 winner in the LymeX Diagnostics Prize, a LymeX Innovation Accelerator prize competition intended to accelerate the development of Lyme disease diagnostics. As a Phase 1 winner, we received $100,000 and an invitation to participate in a second phase. In February 2024, we were selected as a Phase 2 winner and received $265,000.

In July 2023, we received Breakthrough Device Designation for our *Candida auris* (*C. auris*) test, a direct-from-blood molecular diagnostic test designed to run on the T2Dx Instrument and detect *C. auris*. *C. auris* is a multidrug-resistant fungal pathogen recognized as a serious global health threat with a mortality rate of up to 60%, and is difficult to identify with standard laboratory methods, which can lead to inappropriate treatment. We plan to expand the test menu on the T2Dx Instrument by seeking 510(k) clearance from the FDA to add *C. auris* detection to the FDA-cleared T2Candida Panel.

In October 2023, we submitted a 510(k) premarket notification to the FDA to expand the number of pathogens detected on the FDA-cleared T2Bacteria Panel to include the detection of *Acinetobacter baumannii* (*A. baumannii*). *A. baumannii* is a cause of bloodstream infections especially in critically ill patients, which can range from a benign transient bacteremia to septic shock.

In December 2023, we submitted a 510(k) premarket notification to the FDA to expand the use of the T2Candida Panel to include pediatric testing. *Candida* species are a major contributor to morbidity and mortality in hospitalized children.

Nasdaq Compliance Update

On March 30, 2023, the Company received notice from The Nasdaq Stock Market LLC ("Nasdaq") indicating that, for the last thirty consecutive business days, the bid price for the Company's common stock had closed below the minimum $1.00 per share requirement for continued listing on the Nasdaq Capital Market under Nasdaq Listing Rule 555(a)(2) (the "Minimum Bid Price Rule"). On May 23, 2023, Nasdaq notified the Company that its securities were subject to delisting due to non-compliance with the Minimum Bid Price Rule and to maintain a minimum value of listed securities (the "MVLS Rule") of at least $35 million. The Company requested a hearing with Nasdaq and, on July 6, 2023, appealed to the Nasdaq Hearings Panel for an extension to the time period in which to regain compliance with the MVLS Rule and the Minimum Bid Price Rule. On July 26, 2023, we filed a definitive proxy statement to effect a reverse stock split of our common stock in connection with our annual meeting that occurred in September 2023 as required by the Nasdaq Hearings Panel. On August 9, 2023, the Company received written notice from Nasdaq informing the Company that it had regained compliance with the MVLS Rule. On September 15, 2023, at the Company's annual meeting of stockholders, the Company's stockholders approved an amendment to the Company's restated certificate of incorporation to effect a reverse stock split of the Company's common stock. On October 12, 2023, the Company announced that its board of directors had approved the reverse stock split at the ratio of 1 post-split share for every 100 pre-split shares, which was effective as of October 12, 2023.

On October 31, 2023, the Company received written notice from Nasdaq informing the Company that it has regained compliance with the Minimum Bid Price Rule. The Company will be subject to a Mandatory Panel Monitor for a period of one year. If, within that one-year monitoring period, the Company fails to comply with the Minimum Bid Price Rule, the Company will not be permitted additional time to regain compliance with the Minimum Bid Price Rule. However, the Company will have an opportunity to request a new hearing with the Nasdaq Hearings Panel prior to the Company's securities being delisted from Nasdaq.

On November 20, 2023, the Company received written notice from Nasdaq informing the Company that it no longer satisfied the MVLS Rule. In accordance with the terms of the Mandatory Panel Monitor, the Company was not granted a grace period but rather issued a delist determination, which will be stayed if the Company exercises its right to appeal by requesting a hearing and paying a non-refundable $20,000 fee. The Company has paid the $20,000 applicable fee and requested a new hearing, which will stay any further action by Nasdaq at least pending the issuance of its decision and the expiration of any extension that may be granted to the Company as a result of the hearing. The Company's common stock will remain listed and eligible to trade on Nasdaq pending the outcome of the hearing. On February 15, 2024, the Company appealed to the Nasdaq Hearings Panel for an extension to the time period in which to regain compliance with the MVLS Rule. On March 11, 2024, the Company received notice from the Nasdaq Hearings Panel that it had granted the Company's request for continued listing on Nasdaq, subject to the Company demonstrating compliance with Nasdaq's MVLS Rule on or before May 20, 2024.

Financial Overview

Revenue

We generate revenue from the sale of our products, related services, reagent rental agreements and government contributions.

Grants received, including cost reimbursement agreements, are assessed to determine if the agreement should be accounted for as an exchange transaction or a contribution. An agreement is accounted for as a contribution if the resource provider does not receive commensurate value in return for the assets transferred.

Product revenue is generated by the sale of instruments and consumable diagnostic tests predominantly through our direct sales force in the United States and distributors in geographic regions outside the United States. We generally do not offer product returns or exchange rights (other than those relating to defective goods under warranty) or price protection allowances to our customers, including our distributors. Payment terms granted to distributors are the same as those granted to end-user customers and payments are not dependent upon the distributors' receipt of payment from their end-user customers. We either sell instruments to customers and international distributors or retain title and place the instrument at the customer site pursuant to a reagent rental agreement. When the instrument is placed under a reagent rental agreement, our customers generally agree to fixed term agreements, which can be extended, and incremental charges on each consumable diagnostic test purchased. Shipping and handling costs are billed to customers in connection with a product sale.

Fees paid to member-owned group purchasing organizations ("GPOs") are deducted from related product revenues.

Direct sales of instruments include warranty, maintenance and technical support services typically for one year following the installation of the purchased instrument ("Maintenance Services"). Maintenance Services are separate performance obligations as they are service based warranties and are recognized on a straight-line basis over the service delivery period. After the completion of the initial Maintenance Services period, customers have the option to renew or extend the Maintenance Services typically for additional one-year periods in exchange for additional consideration. The extended Maintenance Services are also service based warranties that represent separate purchasing decisions.

We warrant that consumable diagnostic tests will be free from defects, when handled according to product specifications, for the stated life of the product. To fulfill valid warranty claims, we provide replacement product free of charge.

Our current sales strategy is to drive adoption of our test platform installed base in hospitals and to increase test use by our existing hospital customers. Accordingly, we expect the following to occur:

- recurring revenue from our consumable diagnostic tests will increase; and
- become a more predictable and significant component of total revenue; and
- gain manufacturing economies of scale through the growth in our sales, resulting in improving gross margins and operating margins.

The BARDA contract expired in September 2023.

Cost of Product Revenue

Cost of product revenue includes the cost of materials, direct labor and manufacturing overhead costs used in the manufacture of our consumable diagnostic tests sold to customers and related license and royalty fees. Cost of product revenue also includes depreciation on the revenue-generating T2Dx Instruments that have been placed with our customers under reagent rental agreements; costs of materials, direct labor and manufacturing overhead costs on the T2Dx Instruments sold to customers; and other costs such as customer support costs, warranty and repair and maintenance expense on the T2Dx Instruments that have been placed with our customers under reagent rental agreements. We manufacture the T2Dx Instruments and part of our consumable diagnostic tests in our facilities. We outsource the manufacturing of components of our consumable diagnostic tests to contract manufacturers. We expect cost of product revenue to decrease as a percentage of revenue as a result of the cost of product revenue improvement initiatives.

Research and development expenses

Our research and development expenses consist primarily of costs incurred for the development of our technology and product candidates, technology improvements and enhancements, clinical trials to evaluate the clinical utility of our product candidates, and laboratory development and expansion, and include salaries and benefits, including stock-based compensation, research related facility and overhead costs, laboratory supplies, equipment, depreciation on T2Dx Instruments used in research and development activities and

contract services. Research and development expenses also include costs of delivering products or services associated with contribution revenue. We expense all research and development costs as incurred.

We expect to continue developing additional product candidates, improving existing products, and conducting ongoing and new clinical trials.

Selling, general and administrative expenses

Selling, general and administrative expenses consist primarily of costs for our sales, marketing, service, medical affairs, finance, legal, human resources, information technology, and general management functions, as well as professional services, such as legal, consulting and accounting services. Other selling, general and administrative expenses include commercial support activity, facility-related costs, fees and expenses associated with obtaining and maintaining patents, clinical and economic studies and publications, marketing expenses, and travel expenses. We expense the majority of selling, general and administrative expenses as incurred. We expect selling, general and administrative expenses to decrease as a percentage of revenue in future periods.

Interest expense to related party

Interest expense to related party consists primarily of interest expense on our notes payable, the amortization of deferred financing costs and debt discount.

Change in fair value of derivative related to Term Loan with related party

The change in fair value of derivative related to Term Loan with related party consists of the change in fair value of the derivative associated with the CRG Term Loan Agreement.

Change in fair value of warrant liabilities

The change in fair value of warrant liabilities consists of the changes in fair value of the Common Stock Warrants, Pre-Funded Warrants and Series A Warrant.

Other, net

Other, net consists of dividend income, other investment income, interest income earned on our cash and cash equivalents, non-recurring expenses and non-recurring gains and losses.

Critical Accounting Policies and Use of Estimates

We have prepared our condensed consolidated financial statements in accordance with accounting principles generally accepted in the United States. Our preparation of these condensed consolidated financial statements requires us to make estimates, assumptions, and judgments that affect the reported amounts of assets, liabilities, expenses, and related disclosures at the date of the condensed consolidated financial statements, as well as revenue and expenses recorded during those periods. We evaluated our estimates and judgments on an ongoing basis. We based our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results could therefore differ materially from these estimates under different assumptions or conditions.

The items that we disclosed as our critical accounting policies and estimates in Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the year ended December 31, 2023 remained materially consistent. For a description of those critical accounting policies, please refer to our Annual Report on Form 10-K filing for the year ended December 31, 2023.

Results of Operations for the Three Months Ended March 31, 2024 and 2023

	Three Months Ended March 31,		
	2024	2023	Change
		(in thousands)	
Revenue:			
Product revenue	$ 2,061	$ 1,655	$ 406
Contribution revenue	—	423	(423)
Total revenue	2,061	2,078	(17)
Costs and expenses:			
Cost of product revenue	4,202	3,995	207
Research and development	3,721	4,471	(750)
Selling, general and administrative	6,738	7,299	(561)
Total costs and expenses	14,661	15,765	(1,104)
Loss from operations	(12,600)	(13,687)	1,087
Other income (expense):			
Interest expense to related party	(1,179)	(1,522)	343
Change in fair value of derivative related to Term Loan with related party	(108)	(770)	662
Change in fair value of warrant liabilities	28	(1,304)	1,332
Other, net	325	(682)	1,007
Total other expense	(934)	(4,278)	3,344
Net loss	$ (13,534)	$ (17,965)	$ 4,431

Product revenue

Product revenue was $2.1 million for the three months ended March 31, 2024 compared to $1.7 million for the three months ended March 31, 2023, an increase of $0.4 million, which was driven by higher consumables sales of $0.2 million and higher instrument and service revenue sales of $0.2 million.

Contribution revenue

Contribution revenue relates to our BARDA agreement and we had no contribution revenue for the three months ended March 31, 2024, compared to $0.4 million for the three months ended March 31, 2023. The decrease of $0.4 million was due to the BARDA agreement expiring in September 2023.

Cost of product revenue

Cost of product revenue was $4.2 million for the three months ended March 31, 2024, compared to $4.0 million for the three months ended March 31, 2023, an increase of $0.2 million. The increase was driven by $0.5 million of costs related to higher instrument sales and $0.2 million of increased costs primarily related to higher consumable sales, partially offset by $0.4 million of decreased costs due to the effect of a change in build plan and manufacturing inefficiencies and $0.1 million of lower service and repair costs.

Research and development expenses

Research and development expenses were $3.7 million for the three months ended March 31, 2024, compared to $4.5 million for the three months ended March 31, 2023, a decrease of $0.8 million. Payroll related and stock-based compensation expenses decreased by $0.9 million due to lower employee headcount, lab and facility expenses decreased by $0.4 million due to lower employee headcount and material purchases, clinical expenses decreased by $0.2 million, and consulting expenses decreased by $0.1 million, partially offset by increased research and development project related expenses of $0.8 million.

Selling, general and administrative expenses

Selling, general and administrative expenses were $6.7 million for the three months ended March 31, 2024, compared to $7.3 million for the three months ended March 31, 2023, a decrease of $0.6 million. The decrease was driven by lower payroll related and stock-based compensation expenses of $0.8 million primarily due to lower employee headcount and lower other expenses of $0.1 million, partially offset by $0.2 million of increased costs related to IT support services and facilities and a $0.1 million increase in consulting expenses and legal expenses.

Interest expense to related party

Interest expense to related party was $1.2 million and $1.5 million for the three months ended March 31, 2024 and 2023, respectively.

Change in fair value of derivative related to Term Loan with related party

The change in fair value of the derivative instrument associated with the CRG Term Loan Agreement (see Note 6 of the notes to our condensed consolidated financial statements) was $0.1 million of expense for the three months ended March 31, 2024, compared to $0.8 million of expense for the three months ended March 31, 2023.

Change in fair value of warrant liabilities

The change in fair value of warrant liabilities consists of a less than $0.1 million reduction of expense primarily associated with the Common Stock Warrants (See Note 8 of the notes to our condensed consolidated financial statements) for the three months ended March 31, 2024. The change in fair value of the warrant liabilities consists of $1.3 million of expense during the three months ended March 31, 2023.

Other, net

Other, net was a reduction of expense of $0.3 million for the three months ended March 31, 2024, primarily consisting of a $0.3 million cash prize received for the Phase 2 LymeX Diagnostics Prize and $0.1 million of dividend income. Other, net was an expense of $0.7 million for the three months ended March 31, 2023, consisting of issuance costs allocated to the Common Stock Warrants.

Liquidity and Capital Resources

We have incurred losses and cumulative negative cash flows from operations since our inception, and as of March 31, 2024 and December 31, 2023, we had an accumulated deficit of $597.8 million and $584.3 million, respectively. We have incurred significant commercialization expenses related to product sales, marketing, manufacturing and distribution. We may seek to continue to fund our operations through public equity or private equity or debt financings, as well as other sources. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. Our failure to raise capital or enter into such other arrangements if and when needed would have a negative impact on our business, results of operations and financial condition.

Historically, the Company has primarily funded its operations through public equity and private debt financings. The Company believes its cash position is insufficient to fund future operations without financings by the first half of 2024. Financings may include public or private equity or debt financings. These financings may not be successful, however, or on terms favorable to the Company or its stockholders which would have a negative impact on the Company's business, results of operations, financial condition and the Company's ability to develop and commercialize its products and ultimately operate as a going-concern.

Equity Distribution Agreement

On March 31, 2021, the Company entered into an Equity Distribution Agreement ("Equity Distribution Agreement") with Canaccord Genuity LLC, as agent ("Canaccord"), pursuant to which the Company may offer and sell shares of common stock, for aggregate gross sale proceeds of up to $75.0 million from time to time from the effective date of the respective registration statement through Canaccord. In July 2023, the Company filed an amendment to the prospectus supplement relating to the offer and sale of shares under the Equity Distribution Agreement to increase the maximum amount of shares that the Company may sell pursuant to its Equity Distribution Agreement with Canaccord Genuity by $65 million. At the time of the amendment, the Company had sold shares of its common stock for gross proceeds of $71.3 million. Under the Equity Distribution Agreement, the Company sold 628,470 shares of common stock during the three months ended March 31, 2024 for net proceeds of $2.2 million, and 6,528 shares of common stock during the three months ended March 31, 2023 for net proceeds of $0.9 million.

We pay Canaccord for its services of acting as agent 3% of the gross proceeds from the sale of the shares pursuant to the Equity Distribution Agreement. Legal and accounting fees are reclassified to share capital upon issuance of shares under the Equity Distribution Agreement.

Plan of operations and future funding requirements

As of March 31, 2024, we had unrestricted cash and cash equivalents of approximately $6.2 million. Our primary uses of capital are, and we expect will continue to be, compensation and related expenses, costs related to our products, clinical trials, laboratory and related supplies, supplies and materials used in manufacturing, legal and other regulatory expenses and general overhead costs.

Until such time as we can generate substantial product revenue, we expect to finance our cash needs, beyond what is currently available or on hand, through a combination of equity offerings, debt financings and revenue from existing and potential research and development and other collaboration agreements. If we raise additional funds in the future, we may need to relinquish valuable rights to our technologies, future revenue streams or grant licenses on terms that may not be favorable to us.

Going Concern

We believe that our cash and cash equivalents of $6.2 million on March 31, 2024 will not be sufficient to fund our current operating plan at least a year from issuance of these condensed consolidated financial statements unless additional funds are raised in the first half of 2024. Certain elements of our operating plan cannot be considered probable.

The Company's Term Loan Agreement (See Note 6 of the notes to our condensed consolidated financial statements) has a minimum liquidity covenant, which initially required the Company to maintain a minimum cash balance of $5.0 million. In May 2023, CRG reduced the minimum liquidity covenant under the Term Loan Agreement from $5.0 million to $500,000 until December 31, 2023. In July 2023, the Company also converted $10.0 million of the outstanding debt with CRG to equity. In October 2023, the Term Loan Agreement was amended to extend both the interest-only period and the maturity date by one year from December 30, 2024 to December 31, 2025, and permanently reduce the minimum liquidity covenant from $5.0 million to $500,000. There can be no assurances that the Company will continue to be in compliance with the cash covenant in future periods without additional funding.

On March 30, 2023, the Company received notice from The Nasdaq Stock Market LLC ("Nasdaq") indicating that, for the last thirty consecutive business days, the bid price for the Company's common stock had closed below the minimum $1.00 per share requirement for continued listing on the Nasdaq Capital Market under Nasdaq Listing Rule 555(a)(2) (the "Minimum Bid Price Rule"). On May 23, 2023, Nasdaq notified the Company that its securities were subject to delisting due to non-compliance with the Minimum Bid Price Rule and to maintain a minimum value of listed securities (the "MVLS Rule") of at least $35 million. The Company requested a hearing with Nasdaq and, on July 6, 2023, appealed to the Nasdaq Hearings Panel for an extension to the time period in which to regain compliance with the MVLS Rule and the Minimum Bid Price Rule. On July 26, 2023, we filed a definitive proxy statement to effect a reverse stock split of our common stock in connection with our annual meeting that occurred in September 2023 as required by the Nasdaq Hearings Panel. On August 9, 2023, the Company received written notice from Nasdaq informing the Company that it had regained compliance with the MVLS Rule. On September 15, 2023, at the Company's annual meeting of stockholders, the Company's stockholders approved an amendment to the Company's restated certificate of incorporation to effect a reverse stock split of the Company's common stock. On October 12, 2023, the Company announced that its board of directors had approved the reverse stock split at the ratio of 1 post-split share for every 100 pre-split shares, which was effective as of October 12, 2023.

On October 31, 2023, the Company received written notice from Nasdaq informing the Company that it has regained compliance with the Minimum Bid Price Rule. The Company will be subject to a Mandatory Panel Monitor for a period of one year. If, within that one-year monitoring period, the Company fails to comply with the Minimum Bid Price Rule, the Company will not be permitted additional time to regain compliance with the Minimum Bid Price Rule. However, the Company will have an opportunity to request a new hearing with the Nasdaq Hearings Panel prior to the Company's securities being delisted from Nasdaq.

On November 20, 2023, the Company received written notice from Nasdaq informing the Company that it no longer satisfied the MVLS Rule. In accordance with the terms of the Mandatory Panel Monitor, the Company was not granted a grace period but rather issued a delist determination, which will be stayed if the Company exercises its right to appeal by requesting a hearing and paying a non-refundable $20,000 fee. The Company has paid the $20,000 applicable fee and requested a new hearing, which will stay any further action by Nasdaq at least pending the issuance of its decision and the expiration of any extension that may be granted to the Company as a result of the hearing. On February 15, 2024, the Company appealed to the Nasdaq Hearings Panel for an extension to the time period in which to regain compliance with the MVLS Rule. On March 11, 2024, the Company received notice from the Nasdaq Hearings Panel that it had granted the Company's request for continued listing on Nasdaq, subject to the Company demonstrating compliance with Nasdaq's MVLS Rule on or before May 20, 2024.

These conditions raise substantial doubt regarding our ability to continue as a going concern for a period of one year after the date that these financial statements are issued. Management's plans to alleviate the conditions that raise substantial doubt include raising additional funding and maintaining reduced operating expenses in order to continue as a going concern for a period of 12 months from the date these financial statements are issued. Management has concluded the likelihood that its plan to successfully obtain sufficient funding from one or more of these sources or maintain reduced expenditures, while reasonably possible, is less than probable. Accordingly, we have concluded that substantial doubt exists about our ability to continue as a going concern for a period of at least 12 months from the date of issuance of these financial statements.

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of the uncertainties described above.

Cash flows

The following is a summary of cash flows for each of the periods set forth below:

	Three Months Ended March 31,	
	2024	2023
	(in thousands)	
Net cash (used in) provided by:		
Operating activities	$ (11,683)	$ (12,940)
Investing activities	—	(120)
Financing activities	2,202	11,848
Net change in cash, cash equivalents and restricted cash	$ (9,481)	$ (1,212)

Net cash used in operating activities

Net cash used in operating activities was approximately $11.7 million for the three months ended March 31, 2024 and consisted of a net loss of $13.5 million adjusted for non-cash items including stock-based compensation expense of $1.6 million, non-cash lease expense of $0.4 million, non-cash interest expense to related party of $0.3 million, a change in fair value of warrant liabilities of less than $0.1 million, depreciation and amortization expense of $0.1 million, a change in fair value of the derivative related to Term Loan with related party of $0.1 million, and a net change in operating assets and liabilities of $0.6 million. The net change in operating assets and liabilities was primarily driven by a decrease in accrued expenses of $0.7 million, a decrease in operating lease liabilities of $0.4 million, and an increase in accounts receivable of $0.2 million due to the timing and volume of instrument and consumable sales, partially offset by an increase in accounts payable of $0.4 million due to the timing of invoices and payments, a decrease in prepaid expenses and other assets of $0.2 million due to the timing of deposits for goods and services, and a decrease in inventory of $0.1 million due to the timing of purchases and shipments.

Net cash used in operating activities was approximately $12.9 million for the three months ended March 31, 2023 and consisted of a net loss of $18.0 million adjusted for non-cash items including stock-based compensation expense of $1.8 million, a change in fair value of the derivative related to Term Loan with related party of $0.8 million, non-cash interest expense to related party of $0.5 million, non-cash lease expense of $0.3 million, depreciation and amortization expense of $0.3 million, a change in fair value of warrant liabilities of $1.3 million, issuance costs related to Common Stock Warrants of $0.7 million, and a net change in operating assets and liabilities of $0.7 million. The net change in operating assets and liabilities was primarily driven by a decrease in accrued expenses of $2.2 million primarily due to the payout of 2022 bonuses, a decrease in accounts receivable of $0.8 million due to payment from BARDA and the timing and volume of instrument and consumable sales, a decrease in operating lease liabilities of $0.3 million, a decrease in prepaid expenses and other assets of $0.1 million due to expensing of the $0.1 million rent deposit for the Billerica lease, partially offset by an increase in accounts payable of $1.8 million due to the timing of invoices and payments and an increase in inventory of $0.9 million due to market increases for securing raw materials and bulk materials purchases.

Net cash used in investing activities

There was no net cash provided by or used in investing activities for the three months ended March 31, 2024.

Net cash used in investing activities was $0.1 million for the three months ended March 31, 2023, and consisted of equipment purchases.

Net cash provided by financing activities

Net cash provided by financing activities was approximately $2.2 million for the three months ended March 31, 2024, and consisted of proceeds from sales of our common stock under the Equity Distribution Agreement, net of issuance costs, of $2.2 million.

Net cash provided by financing activities was approximately $11.8 million for the three months ended March 31, 2023, and consisted primarily of proceeds from public offering, net of issuance costs, of $10.9 million and proceeds from sales of our common stock under the Equity Distribution Agreement, net of issuance costs, of $0.9 million.

Borrowing Arrangements

Term Loan Agreement

In December 2016, we entered into the Term Loan Agreement with CRG. We initially borrowed $40.0 million under the Term Loan Agreement and had the ability to borrow an additional $10.0 million upon receiving specified clearance for the marketing of T2Bacteria by April 30, 2018 (the "Approval Milestone"). We agreed to pay (1) a financing fee based on the amount of principal drawn and (2) a final payment fee based on the principal outstanding upon repayment. The debt discount related to the financing fee and the fees paid to CRG are being amortized over the loan term as interest expense. The final payment fee is accrued as interest expense and is classified consistent with the classification of the Term Loan.

The Term Loan's principal is prepayable at any time partially or in full without a prepayment penalty. Borrowings are collateralized by a lien on substantially all of our assets, including intellectual property. The Term Loan Agreement provides for affirmative and negative covenants, including a requirement to maintain a minimum cash balance of $5.0 million. The Term Loan Agreement includes a subjective acceleration clause whereby an event of default, including a material adverse change in the business, operations, or conditions (financial or otherwise), could result, at CRG's discretion, in the acceleration of the obligations under the Term Loan Agreement. Under certain circumstances, a default interest rate of an additional 4.0% per annum may apply, at CRG's discretion, on all outstanding obligations during the occurrence and continuance of an event of default.

The Term Loan originally had a six-year term, with three years of interest-only payments accruing at a fixed rate of 12.5%, of which 4.0% could be paid in-kind by increasing the principal balance. After achievement of the Approval Milestone, such rates would be reduced and a fourth year of interest-only payments would be granted, after which quarterly payments of principal and interest would be owed through the December 30, 2022 maturity date. Upon achievement of certain performance metrics, the loan would be converted to interest-only until its maturity, at which time all unpaid principal and interest would be due and payable.

In connection with the Term Loan Agreement, we issued warrants to CRG to purchase a total of 105 shares of our common stock, exercisable any time prior to December 30, 2026.

Amendments

The Term Loan Agreement has been amended eleven times. As a result of those amendments, certain terms of the Term Loan have been revised as follows:

- In 2018, upon our achievement of the Approval Milestone, interest on borrowings began accruing at 11.50% per year, 8% of which is payable in cash quarterly and 3.5% of which is deferred and added to principal until maturity.
- In 2019:
  - The final payment fee was increased from 8% to 10% of the principal outstanding upon repayment.
  - We issued additional warrants to CRG to purchase 113 shares of our common stock, exercisable any time prior to September 9, 2029 at an exercise price of $7,750.00 per share, with provisions for termination upon a change of control or a sale of all or substantially all of our assets (these warrants, along with the warrants to purchase 105 shares of common stock previously issued to CRG, are collectively referred to as the "CRG Warrants").
  - We reduced the exercise price for the warrants previously issued to CRG to $7,750.00.
- In 2022, the principal maturity date was extended to December 30, 2024, and the Term Loan's interest-only payment period was extended until that maturity date.
- In 2023:
  - We entered into a waiver and consent with CRG that reduced the minimum liquidity covenant to $500,000 until December 31, 2023.
  - CRG waived certain specified events of default associated with our issuance of shares of Series A Redeemable Convertible Preferred Stock in August 2022 and the subsequent redemption (See Note 7 of the notes to our condensed consolidated financial statements).
  - In July 2023, CRG canceled $10.0 million of the Term Loan's principal in exchange for 483,457 shares of common stock and 93,297 shares of Series B Convertible Preferred Stock.
  - In October 2023, the interest-only period and maturity of the Term Loan were extended to December 31, 2025 and the $500,000 liquidity covenant was made permanent.

The warrants to purchase 218 shares of our common stock remain outstanding on March 31, 2024. There were no covenant violations during the three months ended March 31, 2024.

Amendments made in February 2022, November 2022, October 2023, and the partial principal cancellation in July 2023 were accounted for as troubled debt restructurings. For all restructurings, at the time of the restructuring the future undiscounted cash outflows required under the amended agreement exceeded the carrying value of the debt and no gain was recognized as a result of the restructurings. The effects of each restructuring were accounted for prospectively.

Securities Purchase Agreements

On February 15, 2024, the Company entered into a Securities Purchase Agreement with CRG and affiliated entities pursuant to which the Company will issue (i) shares of the Company's common stock and (ii) to the extent that the issuance of the shares common stock results in CRG beneficially owning greater than 49.99% of the Company's outstanding shares of common stock (or in the case of one of the affiliated entities, greater than 9.99% of the Company's outstanding shares of common stock, determined without regard to any convertible securities held by CRG or affiliated entities), shares of newly designated convertible preferred stock, par value $0.001 per share, at a price per share of the lower of (a) the closing price for the Company's common stock on Nasdaq on the date immediately prior to the closing of the transaction and (b) the average closing price over the five business days prior to the closing of the transaction, in exchange for CRG surrendering for cancellation $15.0 million of outstanding borrowing under the Term Loan Agreement. The closing of the transaction was conditioned on the approval of the Company's stockholders at a stockholder meeting held on April 11, 2024 and was expected to occur within 10 business days following the approval of the Company's stockholders.

On April 11, 2024, the Company's stockholders voted for the approval of the conversion of $15.0 million of its Term Loan Agreement with CRG into equity. On April 12, 2024, the Company issued an aggregate of 3,280,618 shares of Common Stock and an aggregate of 17,160.48 shares of Series A Convertible Preferred Stock, par value $0.001 per share to CRG in exchange for the cancellation of $15.0 million of outstanding loans under the Term Loan Agreement. Each share of Series A Convertible Preferred Stock is convertible into 100 shares of our common stock at the holder's election following issuance, subject to beneficial ownership limitations.

On May 3, 2024, the Company entered into a Securities Purchase Agreement with CRG pursuant to which the Company will issue to CRG in a private placement offering 4,748,335 shares of the Company's common stock in exchange for the cancellation of $15.0 million of outstanding loans under the Term Loan Agreement.

Consents and Amendments to Term Loan Agreement

On April 12, 2024, the Company entered into a Consent and Amendment No. 10 to the Term Loan Agreement. The Consent provides for, among other things, (i) the consent of the Administrative Agent and CRG to the Exchange and (ii) the extension of the period in which the Company may elect to pay a portion of the accrued interest on the term loans in-kind to the earlier of (a) December 31, 2025 and (b) the date on which a default has occurred.

On May 3, 2024, the Company entered into a Consent and Amendment No. 11 to the Term Loan Agreement. Consent No. 11 provides for, among other things, (i) the consent of the Administrative Agent and CRG to the May Exchange and (ii) an amendment to the "Change of Control" definition to allow CRG or their affiliates to acquire a majority of shares in the Company without causing a Change of Control under the Term Loan Agreement.

Classification

The Term Loan Agreement with CRG was classified as a current liability both March 31, 2024 and December 31, 2023. In May 2023, we received a modification and waiver reducing the Term Loan's minimum cash covenant from $5.0 million to $500,000 until December 31, 2023. In addition, in October 2023, the interest-only period and maturity of the Term Loan were extended to December 31, 2025, and the $500,000 liquidity covenant was made permanent. Because management believes it is probable that we will not be able to comply with the covenant unless additional funds are raised, we concluded that the Term Loan and related liabilities should be classified as current.

We have a single compound derivative instrument related to our Term Loan Agreement that requires us to pay additional interest of 4% per annum upon an event of default or if any obligation other than the unpaid principal amount of the Term Loan is not paid when due. Fair value is determined quarterly. The fair value of the derivative was $1.7 million and $1.6 million as of March 31, 2024 and December 31, 2023, respectively, and is classified as a current liability on the condensed consolidated balance sheets to match the classification of the related Term Loan Agreement.

Contractual Obligations and Commitments

There were no other material changes to our contractual obligations and commitments from those described under Management's Discussion and Analysis of Financial Condition and Results of Operations in the Annual Report on Form 10-K for the year ended December 31, 2023.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

As a smaller reporting company, as defined by Rule 12b-2 of the Exchange Act, we are not required to provide this information.

Item 4. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

Management, with the participation of the Chief Executive Officer and the Chief Financial Officer, evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended) as of March 31, 2024. The Company's disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized, and reported on a timely basis and that such information is accumulated and communicated to management, including the Chief Executive Officer and the Chief Financial Officer, as appropriate, to allow timely decisions regarding disclosure.

Based on the evaluation of our disclosure controls and procedures as of March 31, 2024, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, the Company's disclosure controls and procedures were not effective due to material weaknesses in our internal control over (1) the timeliness of assumptions and accounting conclusions reached for unusual transactions, (2) the accounting impact of changes in our sales demand forecast, (3) our year-end reagent inventory count process, and (4) the review of the year-end tax provision and 382 study prepared by third-party experts. Each of these material weaknesses were included in the Form 10-K for the year ended December 31, 2023 and remain unremediated as of March 31, 2024.

The Company took actions to remediate the deficiencies in its internal controls over financial reporting and implemented additional processes designed to address the underlying causes associated with the above-mentioned material weaknesses. These include (1) enhanced evaluation considerations of unusual transactions including the timely use of third-party experts, (2) enhanced evaluation procedures to consider the effect of changes in our sales demand forecast, (3) enhanced physical inventory count procedures, and (4) enhanced review procedures of the year-end tax provision and 382 study prepared by third-party experts.

Management will monitor the progress of the remediation plan and report regularly to the audit committee on the progress and results of the remediation plan, including the identification, status and resolution of internal control deficiencies. As the Company continues to evaluate and work to improve its internal control over financial reporting, management may determine to take additional measures to address the material weaknesses or determine to modify the remediation plans described above. Until the remediation steps set forth above are fully implemented and operating for a sufficient period of time, the material weaknesses described above will continue to exist.

(b) Changes in Internal Control over Financial Reporting

Except as noted above, there have been no changes to the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II.
OTHER INFORMATION

Item 1. Legal Proceedings

On September 8, 2021, the Company entered into a 10-year lease agreement (the “Lease”) with Farley White Concord Road, LLC (the “Landlord”), pursuant to which the Company leased approximately 70,125 square feet for its occupancy and use as office, laboratory and commercial manufacturing space at 290 Concord Road, Billerica, Massachusetts (the “Premises").

On January 17, 2023, the Landlord sent a Notice of Termination (the “Notice”) of the Lease to the Company. The Notice provides that the Landlord terminated the Lease because of the Company’s alleged failure to perform its obligations under the Lease in a timely manner and the Company’s alleged breach of the covenant of good faith and fair dealing. In connection with the Notice, on January 18, 2023, the Landlord filed a complaint in the Massachusetts Superior Court and has unilaterally deducted the Company’s $1,000,000 security deposit for its alleged damages. In addition, the Landlord is seeking damages for unpaid rent, brokerage fees, transaction costs, attorney's fees and court costs.

On March 1, 2023, the Company filed a response to the Landlord’s complaint and a counterclaim alleging that the Landlord breached its obligations under the contract and unlawfully drew on the security deposit, in addition to breaching its covenants of good faith and fair dealing, making fraudulent misrepresentations, and engaging in deceptive and unfair trade practices.

The Company intends to pursue legal remedies available under applicable laws.

Item 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the factors discussed in “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2023. Other than as set forth below, there have been no material changes from the risk factors previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2023.

Our management has performed an analysis of our ability to continue as a going concern and has identified substantial doubt about our ability to continue as a going concern.

As of March 31, 2024, we had $6.2 million in unrestricted cash and cash equivalents which, without additional funding, will not be sufficient to meet our obligations within the next twelve months from the date of issuance of this Quarterly Report. Based on their assessment, our management has raised concerns about our ability to continue as a going concern. As substantial doubt about our ability to continue as a going concern exists, our ability to finance our operations through equity financing or otherwise could be impaired. Our ability to fund working capital, make capital expenditures, and service our debt depends on our ability to generate cash from operating activities, which is subject to its future operating success, and obtain financing on reasonable terms, which is subject to factors beyond our control, including general economic, political, and financial market conditions. The capital markets have in the past experienced, are currently experiencing, and may in the future experience, periods of upheaval that could impact the availability and cost of financing and there can be no assurances that such financing will be available to the Company on satisfactory terms, or at all. Management continues to explore raising additional capital through equity financing to supplement the Company’s capitalization and liquidity, but there can be no assurance that such financing will be available on terms commercially acceptable to the Company, or at all.

Item 2. Unregistered Sales of Equity Securities, Use of Proceeds, and Issuer Purchases of Equity Securities

Not applicable.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

(a) None.

(b) None.

(c) None of the Company's directors or executive officers adopted or terminated a Rule 10b5-1 trading arrangement or a non-Rule 10b5-1 trading arrangement during the Company's fiscal quarter ended March 31, 2024, as such terms are defined under Item 408(a) of Regulation S-K under the Exchange Act.

Item 6. Exhibits, Financial Statement Schedules

Exhibit Number	Exhibit Description
3.1	Restated Certificate of Incorporation of the Company, as amended (incorporated by reference to Exhibit 3.1 of the Company's Form 8-K (File No. 001-36571) filed on August 12, 2014)
3.2	Certificate of Amendment of Restated Certificate of Incorporation of the Company dated July 23, 2021 (incorporated by reference to Exhibit 3.1 of the Company's Form 8-K (File No. 001-36571) filed on July 23, 2021)
3.3	Certificate of Amendment of Restated Certificate of Incorporation of the Company dated October 12, 2022 (incorporated by reference to Exhibit 3.1 of the Company's Form 8-K (File No. 001-36571) filed on October 12, 2022)
3.4	Certificate of Designation of Preferences, Rights and Limitations of Series A Preferred Stock (incorporated by reference to Exhibit 3.1 of the Company's Form 8-K (File No. 001-36571) filed on July 6, 2023)
3.5	Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock (incorporated by reference to Exhibit 3.2 of the Company's Form 8-K (File No. 001-36571) filed on July 6, 2023)
3.6	Certificate of Amendment of Restated Certificate of Incorporation of the Company dated October 12, 2023 (incorporated by reference to Exhibit 3.1 of the Company's Form 8-K (File No. 001-36571) filed on October 12, 2023)
3.7	Third Amended and Restated Bylaws of the Company (incorporated by reference to Exhibit 3.4 of the Company's Form 10-Q (File No. 001-36571) filed on August 16, 2022)
4.1	Form of Common Stock Certificate of the Company (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-1/A (File No. 333-197193) filed on July 28, 2014)
4.2	Fourth Amended and Restated Investors' Rights Agreement, dated as of March 22, 2013, as amended (incorporated by reference to Exhibit 4.2 of the Company's Registration Statement on Form S-1/A (File No. 333-197193) filed on July 28, 2014)
4.3	Registration Rights Agreement dated as of July 29, 2019 by and between T2 Biosystems Inc. and Lincoln Park Capital Fund, LLC (incorporated by reference to Exhibit 4.1 of the Company's Form 8-K (File No. 001-36571) filed on July 30, 2019)
4.4	Form of Warrant (incorporated by reference to Exhibit 4.1 of the Company's Form 10-Q (File No. 001-36571) filed on August 16, 2022)
4.5	Pre-Funded Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.1 of the Company's Form 8-K (File No. 001-36571) filed on February 16, 2023)
4.6	Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.2 of the Company's Form 8-K (File No. 001-36571) filed on February 16, 2023)
10.1	Securities Purchase Agreement, dated February 15, 2024 by and between the Company and the Lenders party thereto (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K (File No. 001-36571) filed on February 15, 2024)
31.1*	Certification of principal executive officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification of principal financial officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2**	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document

Exhibit Number	Exhibit Description
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith
** Furnished herewith
† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment pursuant to Rule 406 under the Securities Act of 1933, or the Securities Act.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

T2 BIOSYSTEMS, INC.

Date: May 6, 2024

By: /s/ JOHN SPERZEL

John Sperzel
President, Chief Executive Officer and Chairman of the Board
(Principal Executive Officer)

Date: May 6, 2024

By: /s/ JOHN M. SPRAGUE

John M. Sprague
Chief Financial Officer
(Principal Accounting Officer and Principal Financial Officer)

Exhibit 31.1

CERTIFICATION
PURSUANT TO 17 CFR 240.13a-14
PROMULGATED UNDER
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John Sperzel, certify that:

1. I have reviewed this quarterly report on Form 10-Q of T2 Biosystems, 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

5. The registrant's other certifying officer(s) 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.

/s/ John Sperzel
John Sperzel
President, Chief Executive Officer and Chairman of the Board of Directors
(Principal Executive Officer)

Date: May 6, 2024

Exhibit 31.2

CERTIFICATION
PURSUANT TO 17 CFR 240.13a-14
PROMULGATED UNDER
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John M. Sprague, certify that:

1. I have reviewed this quarterly report on Form 10-Q of T2 Biosystems, 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

5. The registrant's other certifying officer(s) 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.

/s/ John M. Sprague
John M. Sprague
Chief Financial Officer
(Principal Accounting Officer and Principal Financial Officer)

Date: May 6, 2024

Exhibit 32.1

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of T2 Biosystems, Inc. (the "Company") on Form 10-Q for the period ending March 31, 2024 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John Sperzel, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 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.

/s/ John Sperzel

John Sperzel
President, Chief Executive Officer and Chairman of the Board of Directors
(Principal Executive Officer)

Date: May 6, 2024

Exhibit 32.2

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of T2 Biosystems, Inc. (the "Company") on Form 10-Q for the period ending March 31, 2024 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John M. Sprague, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 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.

/s/ John M. Sprague

John M. Sprague
Chief Financial Officer
(Principal Accounting Officer and Principal Financial Officer)

Date: May 6, 2024