

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 September 30, 2024.

or

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

Commission File Number: 001-33852

VIRNETX
VirnetX Holding Corporation
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

77-0390628
(I.R.S. Employer Identification No.)

308 Dorla Court, Suite 206 Zephyr Cove, Nevada
(Address of principal executive offices)

89448
(Zip Code)

Registrant's telephone number, including area code: (775) 548-1785
Former name, former address and former fiscal year, if changed since last report: N/A

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 \$0.0001 per share	VHC	NYSE

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

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

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

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

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

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

3,729,122 shares of the registrant's Common Stock were outstanding as of November 9, 2024.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

We have included or incorporated by reference in this Quarterly Report on Form 10-Q (this “Report”), and from time to time we may make statements that may constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These forward-looking statements are based upon our current expectations, estimates, assumptions, and beliefs concerning future events and conditions and may discuss, among other things, anticipated future performance (including sales and earnings), products, expected growth, future business plans and costs (including investments, partnerships and collaborations, marketing and business development, staffing strategies and entering into another sector), the impact of potential litigation, the expectation of future stockholder distributions, statements regarding our efforts and ability to maintain compliance with the New York Stock Exchange (“NYSE”) continued listing standard, our beliefs and statements regarding general industry and market conditions and growth rates, as well as general domestic and international economic conditions. Any statement that is not historical in nature is a forward-looking statement and may be identified by the use of words and phrases such as “anticipates,” “believes,” “estimates,” “expects,” “intends,” “plans,” “predicts,” “projects,” “will be,” “will continue,” “will likely result in,” and similar expressions. Readers are cautioned not to place undue reliance on forward-looking statements. Forward-looking statements are necessarily subject to risks, uncertainties, and other factors, many of which are outside our control, which could cause actual results to differ materially from such statements and from our historical results and experience. These risks, uncertainties and other factors include, but are not limited to those described in Item 1A – Risk Factors of this Report and elsewhere in this Report and those described from time to time in our reports filed with the Securities and Exchange Commission (the “SEC”). Readers are cautioned that it is not possible to predict or identify all the risks, uncertainties and other factors that may affect future results and that the risks described herein should not be considered a complete list. Any forward-looking statement speaks only as of the date on which such statement is made, and we undertake no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

Among others, the forward-looking statements appearing in this Report that may not occur include statements that pertain to the activities we have undertaken to commercialize our products and patent portfolio in and outside of the United States including VirnetX One™, War Room™, VirnetX Matrix™ and our Secured Domain Name Registry and Technology. These statements may imply that the worldwide market for our commercialized products is large and will result in significant future revenue for us. However, commercialization of products such as ours is subject to significant obstacles and risks that may delay or prevent future revenues for us.

EXCEPT AS REQUIRED BY LAW, WE UNDERTAKE NO OBLIGATION TO UPDATE OR REVISE ANY FORWARD-LOOKING STATEMENT AS A RESULT OF NEW INFORMATION, FUTURE EVENTS OR OTHERWISE.

VIRNETX HOLDING CORPORATION
INDEX

	Page
<u>PART I — FINANCIAL INFORMATION</u>	2
<u>Item 1 — Financial Statements</u>	2
<u>Condensed Consolidated Balance Sheets at September 30, 2024 (unaudited) and December 31, 2023</u>	2
<u>Condensed Consolidated Statements of Operations for the three and nine months ended September 30, 2024 and 2023 (unaudited)</u>	3
<u>Condensed Consolidated Statements of Comprehensive Loss for the three and nine months ended September 30, 2024 and 2023 (unaudited)</u>	4
<u>Condensed Consolidated Statements of Shareholders' Equity for the three and nine months ended September 30, 2024 and 2023 (unaudited)</u>	5
<u>Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2024 and 2023 (unaudited)</u>	6
<u>Notes to Condensed Consolidated Financial Statements</u>	7
<u>Item 2 — Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	15
<u>Item 3 — Quantitative and Qualitative Disclosures About Market Risk</u>	18
<u>Item 4 — Controls and Procedures</u>	18
<u>PART II — OTHER INFORMATION</u>	18
<u>Item 1 — Legal Proceedings</u>	18
<u>Item 1A — Risk Factors</u>	19
<u>Item 5 — Other Information</u>	30
<u>Item 6 — Exhibits</u>	30
<u>SIGNATURES</u>	31

PART I — FINANCIAL INFORMATION

ITEM 1-FINANCIAL STATEMENTS.

VIRNETX HOLDING CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except share amounts)

	As of September 30, 2024 (unaudited)	As of December 31, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 25,130	\$ 26,289
Investments available for sale	18,624	27,258
Accounts receivables	—	2
Prepaid expenses and other current assets	266	282
Total current assets	44,020	53,831
Other investments at cost	2,500	2,500
Prepaid expenses and other assets	9,005	4,014
Property and equipment, net	62	67
Total assets	\$ 55,587	\$ 60,412
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 280	\$ 440
Accrued payroll and related expenses	384	316
Other liabilities, current	6,471	498
Total current liabilities	7,135	1,254
Other liabilities	2,959	3,145
Total liabilities	10,094	4,399
Commitments and contingencies (Note 4)		
Stockholders' equity:		
Preferred stock, par value \$0.0001 per share Authorized: 10,000,000 shares at September 30, 2024 and December 31, 2023; Issued and outstanding: 0 shares at September 30, 2024 and December 31, 2023	—	—
Common stock, par value \$0.0001 per share Authorized: 100,000,000 shares at September 30, 2024 and December 31, 2023; Issued and outstanding: 3,729,122 shares at September 30, 2024 and 3,618,431 at December 31, 2023	—	—
Additional paid-in capital	243,916	242,520
Accumulated deficit	(198,455)	(186,495)
Accumulated other comprehensive loss	32	(12)
Total stockholders' equity	45,493	56,013
Total liabilities and stockholders' equity	\$ 55,587	\$ 60,412

See accompanying notes to condensed consolidated financial statements.

VIRNETX HOLDING CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)
(in thousands, except per share amounts)

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2024	2023	2024	2023
Revenue	\$ 2	\$ 3	\$ 5	\$ 7
Operating expense:				
Research and development	1,176	1,218	3,667	7,341
Selling, general and administrative	3,213	4,420	10,066	16,333
Total operating expense	4,389	5,638	13,733	23,674
(Loss) from operations	(4,387)	(5,635)	(13,728)	(23,667)
Interest and other income, net	548	716	1,771	2,824
(Loss) before taxes	(3,839)	(4,919)	(11,957)	(20,843)
Income tax (expense) benefit	—	1	(3)	79
Net (loss)	\$ (3,839)	\$ (4,918)	\$ (11,960)	\$ (20,764)
Basic (loss) per share	\$ (1.07)	\$ (1.36)	\$ (3.32)	\$ (5.79)
Diluted (loss) per share	\$ (1.07)	\$ (1.36)	\$ (3.32)	\$ (5.79)
Weighted average shares outstanding - basic	3,603	3,612	3,600	3,586
Weighted average shares outstanding - diluted	3,603	3,612	3,600	3,586

See accompanying notes to condensed consolidated financial statements.

VIRNETX HOLDING CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS (Unaudited)
(in thousands)

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2024	2023	2024	2023
Net (loss)	\$ (3,839)	\$ (4,918)	\$ (11,960)	\$ (20,764)
Other comprehensive income (loss):				
Change in unrealized gain (loss) on investments, net of tax	68	96	46	206
Change in foreign currency translation, net of tax	4	—	(2)	(4)
Total other comprehensive income (loss)	<u>72</u>	<u>96</u>	<u>44</u>	<u>202</u>
Comprehensive (loss)	<u>\$ (3,767)</u>	<u>\$ (4,822)</u>	<u>\$ (11,916)</u>	<u>\$ (20,562)</u>

See accompanying notes to condensed consolidated financial statements.

VIRNETX HOLDING CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (Unaudited)
(in thousands, except per share amounts)

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2024	2023	2024	2023
Total shareholders' equity, beginning balances	\$ 48,809	\$ 66,434	\$ 56,013	\$ 152,244
Common stock and additional paid-in capital:				
Beginning balances	243,465	241,112	242,520	239,753
Common stock issued for equity awards, net	(6)	(6)	(9)	(11)
Stock-based compensation	457	706	1,405	2,070
Ending balances	243,916	241,812	243,916	241,812
Accumulated deficit:				
Beginning balances	(194,616)	(174,470)	(186,495)	(87,195)
Net (loss)	(3,839)	(4,918)	(11,960)	(20,764)
Dividends	—	—	—	(71,429)
Ending balances	(198,455)	(179,388)	(198,455)	(179,388)
Accumulated other comprehensive loss:				
Beginning balances	(40)	(208)	(12)	(314)
Change in unrealized investment gain/loss, net	68	96	46	206
Change in foreign currency translation, net	4	—	(2)	(4)
Ending balances	32	(112)	32	(112)
Total shareholders' equity, ending balances	<u>\$ 45,493</u>	<u>\$ 62,312</u>	<u>\$ 45,493</u>	<u>\$ 62,312</u>
Dividends per share	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 20.00</u>

See accompanying notes to condensed consolidated financial statements.

VIRNETX HOLDING CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)
(in thousands)

	Nine Months Ended September 30,	
	2024	2023
Cash flows from operating activities:		
Net (loss)	\$ (11,960)	\$ (20,764)
Adjustments to reconcile net loss to cash flows from operating activities:		
Depreciation	16	5
Bad debt	—	15
Stock-based compensation	1,405	2,070
Changes in assets and liabilities:		
Accounts receivables	2	(3)
Prepaid expenses and other assets	537	50
Accounts payable	(160)	810
Accrued payroll and related expenses	68	99
Other liabilities	275	(39)
Net cash used in operating activities	<u>(9,817)</u>	<u>(17,757)</u>
Cash flows from investing activities:		
Purchase of property and equipment	(11)	—
Purchase of investments	(26,469)	(36,330)
Proceeds from sale or maturity of investments	35,147	66,811
Net cash provided by investing activities	<u>8,667</u>	<u>30,481</u>
Cash flows from financing activities:		
Payment of dividends	—	(71,429)
Payment of payroll taxes on equity awards	(9)	(11)
Net cash used in financing activities	<u>(9)</u>	<u>(71,440)</u>
Net change in cash and cash equivalents	(1,159)	(58,716)
Cash and cash equivalents, beginning of period	26,289	86,561
Cash and cash equivalents, end of period	<u>\$ 25,130</u>	<u>\$ 27,845</u>
Non-cash transactions		
ROU asset and lease liability at lease modification date (Note 8)	\$ 5,512	\$ —

See accompanying notes to condensed consolidated financial statements.

VIRNETX HOLDING CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except per share amounts)
(Unaudited)

Note 1 — Business Description and Basis of Presentation

VirnetX Holding Corporation (the “Company,” “we,” “us,” or “our”) is an Internet security software and technology company with patented technology for Zero Trust Network Access (“ZTNA”) based secure network communications. Our software and technology solutions, including Secure Domain Name Registry and Technology, VirnetX One™, War Room™, and VirnetX Matrix™ are designed to be device and location-independent, and enable a secure real-time communication environment for all types of enterprise applications, services, and critical infrastructures. Our platform allows government agencies, businesses and other enterprises of all sizes to add a “security umbrella” as an added layer on top of their existing infrastructure to further reduce risk and bolster security against ever-growing cyberthreats to data, operating systems, other infrastructure products and gateway security controllers.

Note 2 — Summary of Significant Accounting Policies

Unaudited Interim Financial Information

The accompanying Condensed Consolidated Balance Sheet as of September 30, 2024, the Condensed Consolidated Statements of Operations for the three and nine months ended September 30, 2024 and 2023, the Condensed Consolidated Statements of Comprehensive Loss for the three and nine months ended September 30, 2024 and 2023, the Condensed Consolidated Statements of Shareholders’ Equity for the three and nine months ended September 30, 2024 and 2023, and the Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2024 and 2023 are unaudited. These unaudited interim consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States (“U.S. GAAP”). In our opinion, the unaudited interim consolidated financial statements include all adjustments of a normal recurring nature necessary for the fair presentation of our financial position as of September 30, 2024, our results of operations for the three and nine months ended September 30, 2024 and 2023, and our cash flows for the nine months ended September 30, 2024 and 2023. The results of operations for interim periods are not necessarily indicative of the results to be expected for a full year.

These unaudited interim consolidated financial statements should be read in conjunction with the consolidated financial statements and related notes included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on March 15, 2024.

Use of Estimates

We prepare our consolidated financial statements in accordance with U.S. GAAP. In doing so, we have to make estimates and assumptions that affect our reported amounts of assets, liabilities, revenues, and expenses, as well as related disclosure of contingent assets and liabilities. In some cases, we could reasonably have used different accounting policies and estimates. In some cases, changes in the accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ materially from our estimates. To the extent that there are material differences between these estimates and actual results, our financial condition or results of operations will be affected. We base our estimates on past experience and other assumptions that we believe are reasonable under the circumstances, and we evaluate these estimates on an ongoing basis. We refer to accounting estimates of this type as critical accounting policies and estimates, which we discuss further below. We have reviewed our critical accounting policies and estimates with the audit committee of our Board of Directors.

Basis of Consolidation

The consolidated financial statements include the accounts of VirnetX Holding Corporation and our wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated.

Revenue Recognition

We derive revenue from licensing and royalty fees from contracts with customers which often span several years. We account for this revenue in accordance with Accounting Standards Codification (“ASC”) Topic 606, Revenue from Contracts with Customers. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer. A contract’s transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. Our revenue arrangements may consist of multiple-element arrangements, with revenue for each unit of accounting recognized as the product or service is delivered to the customer. With the licensing of our patents, performance obligations are generally satisfied at a point in time as work is complete when our patent rights are transferred to our customers. We generally have no further obligation to our customers regarding our technology.

Certain contracts may require our customers to enter into a hosting arrangement with us and for these arrangements, revenue is recognized over time, generally over the life of the servicing contract.

Cash and Cash Equivalents

We consider all highly liquid investments purchased with maturities of three months or less at the date of purchase to be cash equivalents. Our cash and cash equivalents are not subject to significant interest rate risk due to the short maturities of these investments.

Investments

Investments classified as available-for-sale are recorded at fair market value. Unrealized gains and losses are reported as other comprehensive income. Realized gains and losses are recorded in income in the period they are realized using specific identification of each security’s cost basis. We invest our excess cash primarily in highly liquid debt instruments including corporate, government and federal agency securities, with contractual maturities of less than two years. By policy, we limit the amount of credit exposure to any one issuer.

We have elected the investment measurement alternative for other investments without readily determinable fair values. During 2023, we invested \$2,000 in L2 Holdings, LLC (“Omniteq”) and \$500 in OP Media, Inc. These investments are carried at our initial cost less any impairment because we do not have the ability to exercise significant influence over operating and financial matters. For these investments, we adjust the carrying value for any purchases or sales of our ownership interests. Periodically, we evaluate these investments for impairment. If we identify an impairment, we reduce the carrying value for the impairment loss with a charge to earnings. We have not identified any impairment as of September 30, 2024.

Property and Equipment

Property and equipment are stated at historical cost, less accumulated depreciation and amortization. Depreciation and amortization are computed using the accelerated and straight-line methods over the estimated useful lives of the assets, which range from five to seven years. Repair and maintenance costs are charged to expense as incurred.

Leases

The Company determines if an arrangement is a lease at inception in accordance ASC Topic 842. Operating lease right-of-use (“ROU”) assets are included in Prepaid expenses and other assets on the Condensed Consolidated Balance Sheets. ROU assets represent the Company’s right to use an underlying asset for the lease term and lease liabilities represent the Company’s obligation to make lease payments arising from the lease. ROU assets and lease liabilities are recognized at the commencement date based on the present value of lease payments over the lease term, using the risk-free rate.

Concentration of Credit Risk and Other Risks and Uncertainties

Our cash and cash equivalents are primarily maintained at two major financial institutions in the United States. Deposits held with these financial institutions may exceed the amount of insurance provided on such deposits. A portion of those balances are insured by the Federal Deposit Insurance Corporation. At times, we had funds that were uninsured. We do not believe that we are subject to any unusual financial risk beyond the normal risk associated with commercial banking relationships. We have not experienced any losses on our deposits of cash and cash equivalents.

Fair Value

The carrying amounts of our financial instruments, including cash equivalents, accounts payable, and accrued liabilities, approximate fair value because of their generally short maturities.

Intangible Assets

We record intangible assets at cost, less accumulated amortization. Amortization of intangible assets is provided over their estimated useful lives, which can range from three to 15 years, on either a straight-line basis or as revenue is generated by the assets.

Impairment of Long-Lived Assets

We identify and record impairment losses on long-lived assets used in operations when events and changes in circumstances indicate that the carrying amount of an asset might not be recoverable, but not less than annually. Recoverability is measured by comparison of the anticipated future net undiscounted cash flows to the related assets' carrying value. If such assets are deemed impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the projected discounted future net cash flows arising from the asset.

Research and Development

Research and development costs include expenses paid to outside development consultants and compensation related expenses for our engineering staff. Research and development costs are expensed as incurred.

Income Taxes

We account for income taxes using the asset and liability method. The asset and liability method requires the recognition of deferred tax assets and liabilities for expected future tax consequences of temporary differences that currently exist between the tax basis and financial reporting basis of our assets and liabilities. We calculate current and deferred tax provisions based on estimates and assumptions that could differ from actual results reflected on the income tax returns filed during the following years. Adjustments based on filed returns are recorded when identified in the subsequent years. The effect on deferred taxes for a change in tax rates is recognized in income in the period that the tax rate change is enacted. In assessing our deferred tax assets, we consider whether it is more likely than not that all or some portion of the deferred tax assets will not be realized.

The 2017 U.S. Tax Cuts and Jobs Act changes IRC Section 174, regarding capitalization of book research and development ("R&D") expenses for income tax purposes. Effective for tax years beginning in 2022, IRC Section 174 requires the capitalization of book R&D expenses which are capitalized and amortized over 5 years for domestic R&D expenses and over 15 years for foreign R&D expenses. To date there has been limited guidance from the IRS on how to quantify the amount of book R&D expenses subject to capitalization, including the indirect expenses supporting the R&D function. Due to the limited guidance, some assumptions were made in our estimates.

A valuation allowance is provided for deferred income tax assets when, in our judgment, based upon currently available information and other factors, it is more likely than not that all or a portion of such deferred income tax assets will not be realized. The determination of the need for a valuation allowance is based on an on-going evaluation of current information including, among other things, historical operating results, estimates of future earnings in different taxing jurisdictions and the expected timing of the reversals of temporary differences. We believe the determination to record a valuation allowance to reduce a deferred income tax asset is a significant accounting estimate because it is based, among other things, on an estimate of future taxable income in the United States and certain other jurisdictions, which is susceptible to change and may or may not occur, and because the impact of adjusting a valuation allowance may be material. In determining when to release the valuation allowance established against our net deferred income tax assets, we consider all available evidence, both positive and negative. We continually assess our ability to generate sufficient taxable income during future periods in which our deferred tax assets may be realized. If and when we believe it is more likely than not that we will recover our deferred tax assets, we will reverse the valuation allowance as an income tax benefit in our statements of operations.

We account for our uncertain tax positions in accordance with U.S. GAAP, which utilizes a two-step approach to evaluate tax positions. Step one, recognition, requires evaluation of the tax position to determine if based solely on technical merits it is more likely than not to be sustained upon examination. Step two, measurement, is addressed only if a position is more likely than not to be sustained. In step two, the tax benefit is measured as the largest amount of benefit, determined on a cumulative probability basis, which is more likely than not to be realized upon ultimate settlement with tax authorities. If a position does not meet the more likely than not threshold for recognition in step one, no benefit is recorded until the first subsequent period in which the more likely than not standard is met, the issue is resolved with the taxing authority, or the statute of limitations expires. Positions previously recognized are reversed if and when we subsequently determine the position no longer is more likely than not to be sustained. Evaluation of tax positions, their technical merits, and measurements using cumulative probability are highly subjective management estimates. Actual results could differ materially from these estimates.

Stock-Based Compensation

We account for stock-based compensation using the fair value recognition method in accordance with U.S. GAAP. We recognize these compensation costs on a straight-line basis over the requisite service period of the award, which is generally a vesting term of four years. We recognize forfeitures, if any, when they occur. In addition, we record stock-based compensation expense for awards granted to non-employees at fair value of the consideration received or the fair value of the equity instruments issued, as they vest, over the performance period (See Note 5 – Stock-Based Compensation).

Earnings per Share

Basic earnings per share are computed by dividing earnings available to common stockholders by the weighted average number of common shares outstanding during the period. Diluted earnings per share is computed by dividing net income by the weighted average number of shares outstanding during the period increased to include the number of additional shares of common stock that would have been outstanding if the potentially dilutive securities had been issued. Additionally, weighted average shares outstanding for both basic and diluted earnings per share include all vested restricted shares issued and outstanding.

New Accounting Pronouncements

In December 2023, the FASB issued Accounting Standards Updated (“ASU”) No. 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures, which requires disaggregated information about an entity’s effective tax rate reconciliation as well as information on income tax paid. The guidance in this ASU is effective for public companies with annual periods beginning after December 15, 2024. We plan to adopt the guidance for the fiscal year ending December 31, 2025. We are currently evaluating the effect adoption of this ASU will have on our consolidated financial statements.

In March 2024, the FASB issued ASU No. 2024-01, Compensation—Stock Compensation (Topic 718): Scope Application of Profits Interest and Similar Awards. The guidance in this ASU is effective for public companies with annual periods beginning after December 15, 2024. We plan to adopt the guidance for the fiscal year ending December 31, 2025. We are currently evaluating the effect adoption of this ASU will have on our consolidated financial statements.

Fair Value of Financial Instruments

Fair value is the price that would result from an orderly transaction between market participants at the measurement date. A fair value hierarchy prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurement) and the lowest priority to unobservable inputs (Level 3 measurement). Level 2 measurements utilize either directly or indirectly observable inputs in markets other than quoted prices in active markets.

Our financial instruments are stated at amounts that equal, or approximate, fair value. When we estimate fair value, we utilize market data or assumptions that we believe market participants would use in pricing the financial instrument, including assumptions about risk and inputs to the valuation technique. We use valuation techniques, primarily the income and market approach, which maximizes the use of observable inputs and minimize the use of unobservable inputs for recurring fair value measurements.

Mutual funds: Valued at the quoted net asset value of shares held.

U.S. agency and treasury securities: Valued at the closing price reported on the active market on which the individual securities are traded.

The following tables show the adjusted cost, gross unrealized gains, gross unrealized losses, and fair value of our securities by significant investment category as of September 30, 2024 and December 31, 2023.

	September 30, 2024					
	Adjusted Cost	Unrealized Gains	Unrealized Losses	Fair Value	Cash and Cash Equivalents	Investments Available for Sale
Cash	\$ 1,864	\$ —	\$ —	\$ 1,864	\$ 1,864	\$ —
Level 1:						
Mutual funds	20,035	—	—	20,035	20,035	—
U.S. agency and treasury securities	21,798	57	—	21,855	3,231	18,624
	<u>41,833</u>	<u>57</u>	<u>—</u>	<u>41,890</u>	<u>23,266</u>	<u>18,624</u>
Total	<u>\$ 43,697</u>	<u>\$ 57</u>	<u>\$ —</u>	<u>\$ 43,754</u>	<u>\$ 25,130</u>	<u>\$ 18,624</u>
	December 31, 2023					
	Adjusted Cost	Unrealized Gains	Unrealized Losses	Fair Value	Cash and Cash Equivalents	Investments Available for Sale
Cash	\$ 1,452	\$ —	\$ —	\$ 1,452	\$ 1,452	\$ —
Level 1:						
Mutual funds	20,040	—	—	20,040	20,040	—
U.S. agency and treasury securities	32,046	27	(18)	32,055	4,797	27,258
	<u>52,086</u>	<u>27</u>	<u>(18)</u>	<u>52,095</u>	<u>24,837</u>	<u>27,258</u>
Total	<u>\$ 53,538</u>	<u>\$ 27</u>	<u>\$ (18)</u>	<u>\$ 53,547</u>	<u>\$ 26,289</u>	<u>\$ 27,258</u>

Note 3 — Income Taxes

For the three and nine months ended September 30, 2024, we recognized income tax expense of \$0 and \$3, an effective income tax rate of approximately 0.0% for both periods. For the three and nine months ended September 30, 2023, we recognized an income tax benefit of \$1 and \$79, an effective income tax rate of 0.0% and 0.4%. The effective tax rate was lower than the statutory federal income tax rate during 2023 and 2024 primarily due to the change in valuation allowance.

Our tax years for 2005 and forward are subject to examination by the U.S. tax authority and various state tax authorities because we utilized the NOLs and tax credits generated in those years in 2020. The statute of limitations for those years expires three years after October 2021, the date we filed our 2020 income tax returns. The California Franchise Tax Board is currently conducting an audit on the Company's 2019, 2020 and 2021 California tax returns; the outcome of the audit is yet to be determined.

We are required to recognize the financial statement effects of a tax position when it is more likely than not, based on the technical merits, that the position will be sustained upon examination. At September 30, 2024, we have no uncertain tax positions. Our policy is to recognize interest and penalties accrued on uncertain tax positions as a component of income tax expense. We had no accrued interest or penalties related to uncertain tax positions at September 30, 2024.

Note 4 — Commitments and Related Party Transactions

We have a non-exclusive service agreement for the use of an aircraft from K2 Investment Fund LLC (“LLC”) for business travel for employees of the Company. We incurred fees and reimbursements to the LLC of approximately \$446 and \$1,132 during the three and nine months ended September 30, 2024, and \$314 and \$713 during the three and nine months ended September 30, 2023. We pay for the Company’s usage of the aircraft and have no rights to purchase. Our Chief Executive Officer and Chief Administrative Officer are the managing partners of the LLC and control the equity interests of the LLC. The agreement with the LLC provides for use of the plane at an initial rate of \$8 per flight hour which increased to \$9.8 per flight hour in April 2024. The agreement contains no minimum usage requirement and includes other terms and conditions. The agreement can be cancelled by either us or the LLC with 30 days’ notice and renews on an annual basis unless terminated by either party. Neither party has exercised their termination rights.

See Note 8 – Leases for further discussion of our lease commitments.

Note 5 — Stock-Based Compensation

Our stockholders approved an amendment to the Amended and Restated 2013 Equity Incentive Plan (the “Plan”) at our annual shareholders’ meeting in June 2024, which among other things, added 1,000,000 shares to the plan. The Plan provides for the granting of equity awards including stock options, restricted stock units (“RSUs”) and restricted stock. Options granted under the Plan are granted with an exercise price equal to the fair value of our stock on the date of grant. RSUs and restricted stock are granted at the fair value of our stock on the date of grant because they have no exercise price. The fair value of options, RSUs and restricted stock are expensed over the vesting periods. All options, RSUs and restricted stock are subject to forfeiture if service terminates prior to the shares vesting. At September 30, 2024, there were 1,081,278 shares available for grant under the Plan.

Stock-based compensation expense included in general and administrative expense was \$309 and \$449, and in research and development expense was \$149 and \$257, for the three months ended September 30, 2024 and 2023, respectively. Stock-based compensation expense included in general and administrative expense was \$802 and \$1,213, and in research and development expense was \$603 and \$857, for the nine months ended September 30, 2024 and 2023, respectively.

No restricted stock awards were granted during the three months ended September 30, 2024. During the nine months ended September 30, 2024, we granted 119,000 shares of restricted stock with a weighted average grant date fair value of \$5.58. We paid \$6 in withholding taxes on shares of restricted stock, which is reflected as financing costs in the accompanying statement of cash flows; the grantees surrendered shares of equal value, and those surrendered shares were cancelled. During the three and nine months ended September 30, 2023, we granted 36,927 shares of restricted stock with a weighted average grant date fair value of \$9.12. We paid \$6 in withholding taxes on shares of restricted stock, which is reflected as financing costs in the accompanying statement of cash flows; the grantees surrendered shares of equal value, and those surrendered shares were cancelled.

No options were granted during the three and nine months ended September 30, 2024. During the three and nine months ended September 30, 2023, we granted 1,875 options with a weighted average grant date fair value of \$7 per share. No options were exercised during the three and nine months ended September 30, 2024 or 2023.

No RSUs were granted during the three and nine months ended September 30, 2024. No RSUs were granted during the three months ended September 30, 2023. During the nine months ended September 30, 2023, we granted 1,248 RSUs with a grant date fair value of \$10 per share. During the nine months ended September 30, 2024 and 2023, we issued 7,166 and 10,763 shares of common stock as a result of vesting RSUs, for which we paid \$3 and \$5, respectively, in withholding taxes, which is reflected as financing costs in the accompanying statement of cash flows; the grantees surrendered shares of equal value, and those surrendered shares were cancelled.

As of September 30, 2024 and 2023, the unrecognized stock-based compensation expense related to unvested awards (including stock options, RSUs, and restricted stock) was \$1,778 and \$3,712, respectively, which will be amortized over an estimated weighted average period of approximately 2.16 years and 2.62 years, respectively.

During the nine months ended September 30, 2024, we returned 49,937 options, 2,897 RSUs and 12,494 shares of restricted stock to the plan due to termination of employees and the expiration of unexercised options.

Note 6 — Equity

Common Stock

During the nine months ended September 30, 2024, we issued 119,000 shares of restricted stock, as well as 7,166 shares of common stock as a result of vesting RSUs. During the nine months ended September 30, 2023, we issued 36,927 shares of restricted stock, as well as 10,763 shares of common stock as a result of vesting RSUs.

Warrants

In 2020, we issued warrants for the purchase of 1,250 shares of common stock at an exercise price of \$115 per share, exercisable on the date of grant, expiring in April 2025. The weighted average fair value at the grant date was \$83.20 per warrant. The fair value at the grant date was estimated utilizing the Black-Scholes valuation model with the following weighted average assumptions (i) dividend yield on our common stock of 0 percent (ii) expected stock price volatility of 97 percent (iii) a risk-free interest rate of 0.27 percent and (iv) and expected option term of 5 years.

Warrants Issued	Exercise Price	Outstanding and Exercisable			Terminated / Cancelled	Outstanding and Exercisable		Expiration Date
		December 31, 2023	Issued	Exercised		September 30, 2024		
1,250	\$ 115	1,250	—	—	—	1,250	April 30, 2025	

Note 7 — Litigation

From time to time, we are subject to various legal proceedings, the outcomes of which are inherently uncertain. We record any potential gains related to legal proceedings only after cash is collected. We record a liability when it is probable that a loss has been incurred and the amount is reasonably estimable, the determination of which requires significant judgment. As additional information becomes available, we reassess our potential liability and may revise our estimates. Such resolutions could have a material impact on future quarterly or annual results of operations.

One or more potential intellectual property infringement claims may also be available to us against certain other companies who have the resources to defend against any such claims. Although we believe these potential claims are likely valid, commencing a lawsuit can be expensive and time-consuming, and there is no assurance that we could prevail on such potential claims if we made them.

Note 8 — Leases

We lease office space in Nevada. The operating lease requires monthly payments of \$5 and expires in October 2025. At September 30, 2024, our ROU asset and lease liability totaled \$55. Lease expense totaled \$14 and \$42 for the three and nine months ended September 30, 2024. Lease expense totaled \$13 and \$41 for the three and nine months ended September 30, 2023.

We lease a facility in Utah to be used for technical integration and as a training facility. This operating lease requires monthly payments starting at \$72, includes periodic increases, provides nine months of free rent, and expires in April 2029. At September 30, 2024, our ROU asset and lease liability totaled \$3,099 and \$3,578, respectively. Lease expense totaled \$210 and \$629 for the three and nine months ended September 30, 2024.

We also lease a facility in California for corporate promotional and marketing purposes which was prepaid at inception and expires in 2025. In March 2024, we renewed the lease recording an ROU asset and lease liability of \$5,512. The renewal period begins in 2025, continues through 2035, and requires either a single payment of \$6,000 or annual payments each March beginning at \$600, increasing annually, for a total commitment of approximately \$7,500. At September 30, 2024, our ROU asset totaled \$5,757 and our lease liability totaled \$5,792. Lease expense totaled \$143 and \$384 for the three and nine months ended September 30, 2024, and \$75 and \$225 for the three and nine months ended September 30, 2023.

Payments due under the above leases as of September 30, 2024 are as follows:

Due in 2024	\$	235
Due in 2025		6,946
Due in 2026		927
Due in 2027		954
Due in 2028		983
Thereafter		336
		<u>10,381</u>
Less imputed interest		(956)
Total	\$	<u>9,425</u>

We have a service agreement for the use of an aircraft from a related party discussed in more detail in Note 4 – Commitments and Related Party Transactions. We incurred rental fees and reimbursements to the entity of approximately \$446 and \$1,132 during the three and nine months ended September 30, 2024 compared to \$314 and \$713 incurred during the three and nine months ended September 30, 2023.

Note 9 — Earnings Per Share

Basic earnings per share are based on the weighted average number of common shares outstanding for the period. Diluted earnings per share are based on the weighted average number of common shares and potentially dilutive common shares outstanding. Unvested restricted shares (127,865 in 2024 and 34,990 in 2023) are excluded from weighted average shares outstanding. Potential common shares outstanding principally include stock options, RSUs and warrants, excluding any potentially dilutive shares convertible at a price higher than the closing price of our stock at the end of each reporting period. The following table shows the computation of basic and diluted earnings per share for the three and nine months ended September 30, 2024 and 2023 (in thousands, except per share amounts):

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2024	2023	2024	2023
Numerator:				
Net (loss)	\$ (3,839)	\$ (4,918)	\$ (11,960)	\$ (20,764)
Denominator:				
Weighted-average basic shares outstanding	3,603	3,612	3,600	3,586
Effect of dilutive securities	—	—	—	—
Weighted-average diluted shares	<u>3,603</u>	<u>3,612</u>	<u>3,600</u>	<u>3,586</u>
Basic (loss) per share	\$ (1.07)	\$ (1.36)	\$ (3.32)	\$ (5.79)
Diluted (loss) per share	\$ (1.07)	\$ (1.36)	\$ (3.32)	\$ (5.79)

We incurred a net loss for the three and nine months ended September 30, 2024 and 2023; therefore, all potentially dilutive securities representing shares of common stock (287,908 at September 30, 2024 and 348,729 at September 30, 2023) were excluded from the computation of diluted earnings per share, because their effect would have been antidilutive.

Note 10 — Subsequent Events

On November 12, 2024 we issued 507,000 shares of restricted stock, with a weighted average fair values at the date of grant of \$6.08. Restricted stock is subject to forfeiture if service terminates prior to the shares vesting and is expensed ratably over the vesting period.

ITEM 2 — MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.**Company Overview**

We are an Internet security software and technology company with patented technology for Zero Trust Network Access (“ZTNA”) based secure network communications. VirnetX’s software and technology solutions, including its Secure Domain Name Registry and Technology, VirnetX One™, War Room™, and VirnetX Matrix™ are designed to be device and location-independent, and enable a secure real-time communication environment for all types of enterprise applications, services, and critical infrastructures. Our technology generates secure connections on a “single-click” basis, significantly simplifying the deployment of secure real-time communication solutions by eliminating the need for end-users to enter any encryption information.

Our product portfolio includes sophisticated technologies, products and services that are available for sale worldwide. Our next-generation, VirnetX One™ platform builds upon our patented Secure Domain Name Registry and Technology to further enhance the security and efficiency of our patented secure communication links. VirnetX One™ is a security-as-a-service platform that protects enterprise applications, services, and infrastructure from cyber-attacks. Our platform allows government organizations, businesses, and other enterprises of all sizes to add a “security umbrella” as an added layer on top of their existing infrastructure to further reduce risk and bolster security against ever-growing cyberthreats to data, operating systems, other infrastructure products and gateway security controllers.

Our War Room™ software product provides safe and secure video conferencing meeting environment where sensitive communications and data is invisible to those not authorized to view it. War Room™ validates permissions of all the users, and devices requesting access to any secure meeting room prior to granting access. We believe our War Room™ will be an attractive solution for government and law enforcement agencies as well as all professional sectors such as legal, financial, and medical where limiting access to confidential data is a critical requirement.

Our VirnetX Matrix™ product provides superior security for internet-enabled enterprise applications and their connected devices, and for control systems currently deployed by those enterprises (e.g., file servers, data back-up systems, VPN/firewalls). VirnetX Matrix™ provides a true “zero-trust” access protection, “single-click” ease of use, and is a highly-effective added layer of protection that is deployed simply, without the need for changes to an enterprise’s existing, in-place infrastructure. We believe VirnetX Matrix™ is an attractive solution for all businesses, cloud and on-premise application service providers, and original equipment manufacturers (“OEMs”), looking to improve visibility and management of their networks to mitigate morphing attacks on their networks and for real time access and control of their users.

We have undertaken activities to commercialize our products and intellectual property in and outside the United States including VirnetX One™, War Room™, VirnetX Matrix™ and our Secured Domain Name Registry and Technology. We believe our product portfolio to secure devices and systems are suitable in areas such as local, state, Federal and foreign governments, healthcare, finance, legal, oil and gas, medical, law enforcement, national defense and related support industries. We continue to actively pursue new sales opportunities in and outside of the United States.

We invested in two companies in the artificial intelligence (“AI”) sector partnering with them to augment the Company’s strategy to provide secure AI to the marketplace. The first investment was with L2 Holdings, LLC (“OmniTeq”), an AI, machine learning (“ML”) and predictive analytics-based solutions provider with a primary focus on selling into the space and defense sectors. In October 2024, OmniTeq signed a Cooperative Research and Development Agreement (CRADA) with the Air Force (AF) Research Laboratory Intelligence Systems Directorate (AFRL/RI) to facilitate collaboration on cybersecurity and Zero Trust technologies to support integrated surveillance and reconnaissance operations as well as AF and joint targeting processes. This agreement allows VirnetX to apply for security clearances for its employees. Our second investment was with OP Media, Inc, a dynamic software platform provider, addressing a critical market requirement for transforming static infrastructure processes and knowledgebases into digital processes that can be continuously optimized using AI, ML, and blockchain technologies for making informed decisions and creating streamlined workflows in real-time, without requiring coding or programming skills. Further, under the terms of our respective agreements, both OmniTeq and OP Media have agreed to integrate our VirnetX One™ family of products and services into their solutions and to resell them to their current and future customers. Both companies have committed to using VirnetX as their exclusive global cybersecurity solution provider and go-to-market partner.

Our employees include the core development team behind our inventions, technology, and software. Some members of this team have worked together for over twenty years and were on the same team that invented and developed this technology while working at Leidos, Inc., or Leidos, (f/k/a Science Applications International Corporation, or SAIC). The team has continued its research and development work to refine our unique network security technology and make it more secure and easy to deploy.

Our portfolio of intellectual property is the foundation of our business model. We currently own U.S. and foreign patents/validations/pending applications. Our patent portfolio is primarily focused on securing real-time communications over the Internet, and related services, and is used in all our technology and products, some of which were acquired by our principal operating subsidiary, VirnetX, Inc., from Leidos in 2006.

Results of Operation

Three and Nine Months Ended September 30, 2024
Compared with the Three and Nine Months Ended September 30, 2023
(in thousands, except per share amounts)

Revenue

We recognized revenue of \$2 and \$5 in the three and nine months ended September 30, 2024 and \$3 and \$7 in the three and nine months ended September 30, 2023.

Research and Development Expenses

Our research and development expenses decreased by \$42 to \$1,176 for the three months ended September 30, 2024, and by \$3,674 to \$3,667 for the nine months ended September 30, 2024. The decrease was primarily due to higher engineering compensation costs in 2023.

Selling, General and Administrative Expenses

Our selling, general and administrative expenses decreased by \$1,207 to \$3,213 for the three months ended September 30, 2024, and by \$6,267 to \$10,066 for the nine months ended September 30, 2024. The decrease is primarily due to lower legal fees and compensation costs in 2024.

Liquidity and Capital Resources

As of September 30, 2024, our cash and cash equivalents totaled approximately \$25,130 and our short-term investments totaled approximately \$18,624, compared to cash and cash equivalents of approximately \$26,289 and short-term investments of approximately \$27,258 at December 31, 2023, respectively. Working capital was \$36,885 at September 30, 2024, and \$52,577 at December 31, 2023.

We expect that our cash and cash equivalents and short-term investments as of September 30, 2024, will be sufficient to fund our current level of operating expense, including legal expenses and provide related working capital for the foreseeable future. Over the longer term, we expect to derive our future revenue from license fees and royalties associated with our patent portfolio, technology, software and secure domain name registry, as well as collaborating with others to integrate our family of cybersecurity products and services into their solutions and to resell them to their current and future customers.

Dividends

On March 30, 2023, we declared a one-time cash dividend of \$20 per share of common stock, paid to shareholders of record as of the close of business on April 10, 2023. The timing and amount of future dividends, if any, will depend on market conditions, corporate business and financial considerations and regulatory requirements.

Income Taxes

For the three and nine months ended September 30, 2024, we recognized income tax expense of \$0 and \$3, an effective income tax rate of approximately 0.0% for both periods. For the three and nine months ended September 30, 2023, we recognized an income tax benefit of \$1 and \$79, an effective income tax rate of 0.0% and 0.4%. The effective tax rate was lower than the statutory federal income tax rate during 2023 and 2024 primarily due to the change in valuation allowance.

Contractual Obligations

In March 2024, we renewed our facility lease in California used for marketing and promotional purposes, which extended the lease through 2035. See Note 8 – Leases in the accompanying consolidated financial statements for details.

Off-Balance Sheet Arrangements

None.

ITEM 3 — QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Interest Rate Risk

We invest our excess cash primarily in highly liquid instruments including time deposits, money market funds, and U.S. agency and treasury securities. We seek to limit the amount of our credit exposure to any one issuer.

Investments in fixed rate instruments carry a degree of interest rate risk. Fixed rate securities may have their fair market value adversely impacted due to a rise in interest rates. Due in part to these factors, our income from investments may decrease in the future.

We considered the historical volatility of short-term interest rates and determined that it was reasonably possible that an adverse change of 100 basis points could be experienced in the near term but would have an immaterial impact in the fair value of our marketable securities, which generally mature within eighteen months of September 30, 2024.

Other Market Risks

We considered the historical volatility of our stock prices and determined that it was reasonably possible that the fair market value of our stock price could increase or decrease substantially in the near term and could have a material impact to our consolidated balance sheets and statement of operations with respect to future stock-based compensation costs and other equity transactions.

ITEM 4 — CONTROLS AND PROCEDURES.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, as of September 30, 2024.

The purpose of this evaluation was to determine whether as of September 30, 2024 our disclosure controls and procedures were effective to provide reasonable assurance that the information we are required to disclose in our filings with the SEC, (i) is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Based on their evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that as of September 30, 2024, our disclosure controls and procedures were effective.

Changes in Internal Control Over Financial Reporting.

There were no changes in our internal control over financial reporting during the quarter ended September 30, 2024, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

ITEM 1 — LEGAL PROCEEDINGS – (See Note 7 — Litigation in the “Notes to Condensed Consolidated Financial Statements”)

ITEM 1A — RISK FACTORS – TO BE UPDATED

Our operations and financial results are subject to various risks and uncertainties, including those described below, which could adversely affect our business, financial condition, results of operations, cash flows, and the trading price of our common and capital stock. You should carefully consider the risks and uncertainties described below in addition to the other information set forth in this Report, including in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes, before making any investment in our common stock. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business. If any of these risk factors occur, you could lose substantial value or your entire investment in our shares.

Risks Related to Our Business and Our Financial Reporting

Our operating results may not be consistent and may be difficult to predict and we may not be able to achieve or sustain profitability in the future.

Our operating results have fluctuated in the past due to several factors. We expect that our future operating results may also fluctuate due to the same or similar factors. We had a net loss of \$4 million for the quarter ended September 30, 2024. We had a net loss of \$27.9 million for the year ended December 31, 2023. As of September 30, 2024, we had an accumulated deficit of \$198.5 million. The following include some of the factors that may cause our operating results to fluctuate:

- Time and resources required to accelerate transition to new product development and sales strategies targeting large enterprises and government customers;
- Our success depends in part on establishing and maintaining relationships with other companies to integrate our family of cybersecurity products and services into their solutions and to resell them to their current and future customers;
- Customer adoption of our VirnetX One™ platform and software products and services;
- The number of product license sales of VirnetX War Room™, VirnetX Matrix™ and associated services;
- Adoption of VirnetX One™ platform by third party application providers of secure communications;
- Intensely competitive market with established brands that have larger customer bases, and greater resources than we do;
- Prolonged economic uncertainties or downturns, globally or in certain regions or industries, could materially adversely affect our business; and
- Government export and import control regulations on selling products with encryption technology in certain international markets.

These fluctuations may make our business particularly difficult to manage, adversely affect our business and operating results, make our operating results difficult for investors to predict and, further, cause our results to fall below investor’s expectations and adversely affect the market price of our common stock. If we fail to increase our revenue to offset any increases in our operating expenses, we may not achieve or sustain profitability in the future.

Our success depends in part on establishing and maintaining relationships with other companies to incorporate our products and services into their technology or vice versa.

Part of our business strategy is to enter into partnerships, strategic investments, and other cooperative arrangements with third parties. We have invested in and we continue to seek to invest in or acquire businesses, technologies, or other assets that we believe could complement or expand our business. In addition, we are regularly involved in cooperative efforts with respect to the incorporation of our products into products of others and vice versa, research and development efforts, and marketing, distributor and reseller arrangements. These relationships are generally non-exclusive, and some of our partners also have cooperative relationships with certain of our competitors or offer some products and services that are competitive with ours. If we lose third-party relationships, if these relationships are not commercially successful, or if we are unable to enter into third-party relationships on commercially reasonable terms in the future, our business could be negatively impacted.

We have limited ability to influence the operations of companies we invest in and could lose some or all of our investment.

In 2023, we invested \$2,000 in L2 Holdings, LLC (“OmniTeq”) and \$500 in OP Media, Inc. These companies operate in the artificial intelligence sector and have agreed to integrate our family of products and services into their solutions and to resell them to their current and future customers. We do not control these companies and have limited ability to influence the operation or financial activities of either company. If either of these companies is unsuccessful in their endeavors we could lose some or all of our \$2,500 investment.

We expect that we will experience long and unpredictable sales cycles, which may impact our operating results.

The sales cycle between initial customer contact and execution of a contract or license agreement with a customer or purchaser of our products can vary widely. We expect that our sales cycles will be long and unpredictable due to several factors, including but not limited to:

- The need to educate potential customers about our product and service capabilities;
- Our customers' budgetary constraints and timing of their budget cycles;
- Delays caused by time-consuming internal review processes customary with potential customers including large governments agencies and institutions in the defense industry; and
- Long sales cycles may increase the risk that our financial resources are exhausted before we are able to generate significant revenue.

In addition, potential customers of our products include local, state, federal and foreign government agencies, as well as institutions in the defense industry. Sales processes to government authorities can be extensive and unpredictable. Government authorities generally have complex budgeting, purchasing, and regulatory processes that govern their capital spending, and their spending is likely to be adversely impacted by economic conditions. In addition, in many instances, sales to government authorities may require field trials and may be delayed by the time it takes for government officials to evaluate multiple competing bids, negotiate terms, and award contracts.

For these reasons, the sales cycle associated with our products is subject to a number of significant risks that are beyond our control. Consequently, if customer orders are delayed or not realized, our revenues and results of operations could be materially and adversely affected.

We have limited technical resources and are at an early stage in commercialization of our VirnetX One™ platform and software products.

Part of our business includes the internal development of commercial products we seek to monetize. This aspect of our business may require significant capital, time and resources and we cannot guarantee that it will be successful or meet our expectations. Based on the scale of our technical resources, our limited historical financial data upon which to base our projected revenue or planned operating expenses related to our software products and services, we may not be able to effectively:

- Implement an effective marketing strategy to promote awareness of our products;
- Attract and retain customers for our products;
- Generate revenues or profit from product sales;
- Provide appropriate levels of customer training and technical support for our products;
- Rapidly anticipate and adapt to changes in the market and evolving customer requirements;
- Protect our products from any system failures or other breaches.

In addition, a high percentage of our expenses are and will continue to be fixed. Accordingly, if we do not generate revenue as and when anticipated, our losses may be greater than expected and our operating results will suffer.

The market in which we participate is intensely competitive, and if we do not compete effectively, our operating results could be harmed.

The market for ZTNA security solutions is rapidly evolving and highly competitive as new entrants and traditional network solutions companies offer cloud-based cybersecurity solutions. Many of our competitors and potential competitors have established brand recognition, larger customer bases, and greater resources than we do. Our primary competitors in the ZTNA market include Appgate, Cloudflare, and Illumio. In the enterprise market, our primary competitors include Zscaler (ZPA), Palo Alto Networks (Prisma Access), Cisco (Umbrella), Citrix (Secure Private Access), Netskope (Private Access for ZTNA) and Cato Networks. As we expand our product offerings and use cases, we will begin to compete with companies that offer bundled security-as-a-service solutions that include Secure Access Service Edge (SASE) and Security Service Edge (SSE). With the introduction of new technologies and market entrants, we expect competition to intensify in the future. For example, disruptive technologies such as generative AI may fundamentally alter the market for our services in unpredictable ways and reduce customer demand. If we fail to compete effectively, our business will be harmed. Some of our competitors offer their products or services at lower prices or for free as part of a broader bundled product sale or enterprise license arrangement, which has placed pricing pressure on our business. If we are unable to achieve our target pricing levels, our operating results will be negatively impacted. For us to compete effectively, we need to introduce new products and services in a timely and cost-effective manner, meet customer expectations and needs at prices that customers are willing to pay, and continue to enhance the features and functionalities of our cloud content management platform. In addition, pricing pressures and increased competition could result in reduced sales, lower margins, losses or the failure of our services to achieve or maintain widespread market acceptance, any of which could harm our business.

Many of our competitors are able to devote greater resources to the development, promotion and sale of their products or services. In addition, many of our competitors have established marketing relationships and major distribution agreements with channel partners, consultants, system integrators and resellers. Competitors may offer products or services at lower prices or with greater depth than our services. Our competitors may be able to respond more quickly and effectively to new or changing opportunities, technologies, standards or customer requirements. Furthermore, some potential customers, particularly large enterprises, may elect to develop their own internal solutions. For any of these reasons, we may not be able to compete successfully against our competitors.

Our products are highly technical and may contain undetected errors, which could cause harm to our reputation and adversely affect our business.

Our products are highly technical and complex and, when deployed, may contain errors or defects. Despite testing, some errors in our products may only be discovered after a product has been installed and used by customers. Any errors or defects discovered in our products after commercial release could result in failure to achieve market acceptance, loss of revenue or delay in revenue recognition, loss of customers and increased service and warranty cost, any of which could adversely affect our business, operating results, and financial condition. In addition, we could face claims for product liability, tort, or breach of warranty, including claims relating to changes to our products made by our channel partners. The performance of our products could have unforeseen or unknown adverse effects on the networks over which they are delivered as well as on third-party applications and services that utilize our services, which could result in legal claims against us, harming our business. Furthermore, we expect to provide implementation, consulting, and other technical services in connection with the implementation and ongoing maintenance of our products, which typically involves working with sophisticated software, computing, and communications systems. We expect that our contracts with customers will contain provisions relating to warranty disclaimers and liability limitations, which may not be upheld. Defending a lawsuit, regardless of its merit, is costly and may divert management's attention and adversely affect the market's perception of us and our products. In addition, if our business liability insurance coverage proves inadequate or future coverage is unavailable on acceptable terms or at all, our business, operating results, and financial condition could be adversely impacted.

Malfunctions of third-party communications infrastructure, hardware and software expose us to a variety of risks that we cannot control.

Our business will depend upon, among other things, the capacity, reliability, security, and unimpeded access of the infrastructure owned by third parties that we will use to deploy our offerings. We have no control over the operation, quality, or maintenance of a significant portion of that infrastructure or whether those third parties will upgrade or improve their equipment. We depend on these companies to maintain the operational integrity of our connections. If one or more of these companies is unable or unwilling to supply or expand its levels of service to us in the future, our operations could be severely interrupted. Also, to the extent that the number of users of networks utilizing our current or future products suddenly increases, the technology platform and secure hosting services which will be required to accommodate a higher volume of traffic may result in slower response times or service interruptions. System interruptions or increases in response time could result in a loss of potential or existing users and, if sustained or repeated, could reduce the appeal of the networks to users. In addition, users depend on real-time communications; outages caused by increased traffic could result in delays and system failures. These types of occurrences could cause users to perceive that our solution does not function properly and could therefore adversely affect our ability to attract and retain licensees, strategic partners, and customers.

System failure or interruption or our failure to meet increasing demands on our systems could harm our business.

The success of our license and service offerings will depend on the uninterrupted operation of various systems, secure data centers and other computer and communication networks that we establish. To the extent, the number of users of networks utilizing our future products suddenly increases, the technology platform and hosting services which will be required to accommodate a higher volume of traffic may result in slower response times, service interruptions or delays or system failures. Our systems and operations will also be vulnerable to damage or interruption from, among other things:

- Power loss, transmission cable cuts and other telecommunications failures;
- Damage or interruption caused by fire, earthquake, and other natural disasters;
- Computer viruses, electronic break-ins, sabotage, vandalism or software defects; and
- Physical or electronic break-ins, sabotage, intentional acts of vandalism, terrorist attacks and other events beyond our control.

System interruptions or failures and increases or delays in response time could result in a loss of potential or existing users and, if sustained or repeated, could reduce the appeal of the networks to users. These types of occurrences could cause users to perceive that our solution does not function properly and could therefore adversely affect our ability to attract and retain licensees, strategic partners, and customers, and result in lost revenue, customer dissatisfaction, or lawsuits against us.

If we are not able to adequately protect our patent rights and trade secrets, our business would be negatively impacted.

We believe our patents are valid, enforceable, and valuable. Notwithstanding this belief, third parties may make claims of infringement with respect to our products or services or invalidity claims with respect to our patents or become aware of our trade secrets by way of leaks from bad actors within or outside of our employee base or otherwise, and such claims could give rise to material cost for defense or settlement or both, and such claims or leaks could jeopardize or substantially delay a successful outcome of litigation we are or may become involved in, divert resources away from our other activities, limit or cease our related revenues, or otherwise materially and adversely affect our business. Even if we are successful in protecting our intellectual property rights, they may not ultimately provide us with any competitive advantages and may be less valuable than we currently expect. These risks may be heightened in countries other than the United States where laws regarding patent protection are less developed and may be negatively affected by the fact that legal standards in the United States and elsewhere for protection of intellectual property rights in Internet-related businesses are uncertain and still evolving. In addition, there are a significant number of United States and foreign patents and patent applications in our areas of interest, and we expect that significant litigation in these areas will continue and will add uncertainty to the value of certain patents and other intellectual property rights in our areas of interest. If we are unable to protect our intellectual property rights or otherwise realize value from them, our business would be negatively affected.

If we experience security breaches or incidents, we could be exposed to liability and our reputation and business could suffer.

We expect to retain certain confidential and proprietary customer information in our secure data centers and secure domain name registry, as well as personal data and other confidential and proprietary information relating to our business. It will be critical to our business strategy that our facilities and infrastructure remain secure and are perceived by the marketplace to be secure. Our secure domain name registry operations will also depend on our ability to maintain our computer and telecommunications equipment in effective working order and to reasonably protect our systems against interruption, and potentially depend on protection by other registrars in the shared registration system. The secure domain name servers that we will operate will be critical hardware to our registry services operations. Additionally, we maintain confidential and proprietary business information, including trade secrets. We expect to have to expend significant time and money to maintain or increase the security of our products, facilities, and infrastructure. Security technologies are constantly being tested by computer professionals, academics and “hackers.” Advances in computer capabilities and the techniques for attacking security solutions, new discoveries in the field of cryptography or other events or developments could result in compromises or breaches of our security measures and could make some or all our products obsolete or unmarketable. Likewise, we may need to dedicate engineering and other resources to mitigate or eliminate security vulnerabilities and may find it necessary or appropriate to repair or replace products already sold or licensed to our customers. Despite the security measures that we and our service providers utilize, our infrastructure and that of our service providers may be vulnerable to physical break-ins, ransomware, computer viruses, other malicious code attacks by hackers, phishing attacks, social engineering, or similar disruptive problems. There can be no assurances our security measures or those of our service providers will prevent security breaches or incidents. Any disruption or security breach or incident that we or our service providers suffer or are perceived to suffer, including any such disruption, breach or incident resulting in a loss of, or damage to, data or systems, or inappropriate disclosure, access, loss, or other processing of confidential, financial, proprietary or personal information, including data related to our personnel, could result in loss, disclosure or other unauthorized processing of such data, could delay our research and development or commercialization efforts, could compel us to comply with breach notification laws and regulations, subject us to mandatory corrective action, and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information. It is possible that we may have to expend additional financial and other resources to address such problems. Remote work by our personnel and those of third parties has resulted in increased vulnerability to cyber-attacks. Additionally, geopolitical tensions and conflicts may create increased risks of cyber-attacks. As a provider of Internet security software and technology, we may be the target of dedicated efforts by hackers and other third parties to overcome or defeat our security measures. Any physical or electronic break-in or other security breach or incident or compromise impacting our products, or any information stored at our secure data centers and domain name registration systems, including any compromise due to human error or employee or contractor malfeasance, may jeopardize the security of information stored on our premises or in the computer systems and networks of our customers. Additionally, any such data security incident, or the perception that one has occurred could also result in adverse publicity, harm to our reputation and competitive position, and therefore adversely affect the market’s perception of the security of electronic commerce and communications over IP networks as well as the security or reliability of our services, which could have a material adverse impact on our business, financial condition, and results of operations.

A security breach or other security incident, or the perception any such event has occurred, could require a substantial level of financial resources to address and otherwise respond to, may be difficult to identify or address in a timely manner, and could result in claims, investigations, inquiries, and other proceedings or actions by private parties or governmental entities that may divert management’s attention and require the expenditure of significant time and resources, and which may cause us to incur substantial fines, penalties, or other liability and related legal and other costs. Cybersecurity risks pose a particularly significant risk to our business given our focus on providing internet security software and secure communications technology. Any actual or perceived security breach or other security incident may also harm our reputation, result in a loss of customers, and make it more difficult or impossible for us to successfully market to others. Any of the foregoing matters could harm our business, operating results and financial condition.

Our products are subject to governmental export and import controls that could subject us to liability or impair our ability to compete in international markets.

Because we incorporate encryption technology into our products, certain of our products are subject to U.S. export controls and may be exported outside the U.S. only with the required export license or through an export license exception. If we were to fail to comply with U.S. export licensing requirements, U.S. customs regulations, U.S. economic sanctions, or other laws, we could be subject to substantial civil and criminal penalties, including fines, incarceration for responsible employees and managers, and the possible loss of export or import privileges. Obtaining the necessary export license for a particular sale may be time-consuming and may result in the delay or loss of sales opportunities. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products to U.S. embargoed or sanctioned countries, governments, and persons. Even though we take precautions to ensure that we comply with all relevant regulations, any failure by us or any partners to comply with such regulations could have negative consequences for us, including reputational harm, government investigations, and penalties.

In addition, various countries regulate the import of certain encryption technology, including through import permit and license requirements, and have enacted laws that could limit our ability to distribute our products or could limit our end-customers' ability to implement our products in those countries. Changes in our products or changes in export and import regulations may create delays in the introduction of our products into international markets, prevent our end-customers with international operations from deploying our products globally or, in some cases, prevent or delay the export or import of our products to certain countries, governments, or persons altogether. Any change in export or import regulations, economic sanctions, or related legislation, shift in the enforcement, or scope of existing regulations, or change in the countries, governments, persons, or technologies targeted by such regulations, could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential end-customers with international operations. Any decreased use of our products or limitation on our ability to export to or sell our products in international markets would likely adversely affect our business, financial condition, and results of operations.

Privacy and data security concerns, data collection and transfer restrictions and related domestic or foreign regulations may limit the use and adoption of our solutions and adversely affect our business.

Personal privacy, information security, and data protection are significant issues in the United States, Europe, and many other jurisdictions where we have operations or offer our products. The regulatory framework governing the collection, processing, storage and use of confidential and proprietary business information and personal data is rapidly evolving. The United States federal, various state and foreign governments have adopted or proposed requirements regarding the collection, distribution, use, security and storage of personally identifiable information and other data relating to individuals, and federal and state consumer protection laws are being applied to enforce regulations related to the online collection, use and dissemination of data.

Further, many foreign countries and governmental bodies, including the European Union ("EU"), where we conduct business, have laws and regulations concerning the collection and use of personal data obtained from their residents or by businesses operating within their jurisdiction. These laws and regulations often are more restrictive than those in the United States. Laws and regulations in these jurisdictions apply broadly to the collection, use, storage, disclosure, and security of data that identifies or may be used to identify or locate an individual, such as names, email addresses and, in some jurisdictions, IP addresses.

We also expect that there will continue to be new proposed laws, regulations and industry standards concerning privacy, data protection and information security in the United States, the EU, and other jurisdictions. For example, the European Commission adopted a General Data Protection Regulation (the “GDPR”) that became fully effective on May 25, 2018, superseding prior EU data protection legislation, imposing more stringent EU data protection requirements, and providing for greater penalties for noncompliance. The United Kingdom has enacted a Data Protection Act and legislation referred to as the UK GDPR that substantially implements the GDPR and provides for a penalty regime similar to the GDPR. We may be required to incur substantial expense in order to make significant changes to our product and business operations in connection with obtaining and maintaining compliance with the GDPR and similar legislation, such as the UK GDPR and UK Data Protection Act, all of which may adversely affect our revenue and product sales. California has enacted legislation, the California Consumer Privacy Act (the “CCPA”) that, among other things, requires covered companies to provide disclosures to California consumers, and afford such consumers abilities to opt-out of certain sales of personal information. The CCPA was modified and expanded by the California Privacy Rights Act (the “CPRA”), which was approved by California voters in the November 2020 election. Additionally, other U.S. states continue to propose, and in certain cases adopt, privacy-focused legislation. For example, Connecticut, Virginia, Utah and Colorado enacted legislation similar to the CCPA and CPRA that took effect in 2023; Florida, Montana, Oregon, and Texas have enacted similar legislation that has become effective in 2024; Delaware, Nebraska, Maryland, New Hampshire, New Jersey, Minnesota, Tennessee, and Iowa have enacted similar legislation that will take effect in 2025; and Indiana, Kentucky, and Rhode Island have enacted similar legislation that will become effective in 2026. We cannot yet fully determine the impact these or future laws, regulations and standards may have on our business, but they may require us to modify our data processing practices and policies and to incur substantial costs and expenses in efforts to comply. Privacy, data protection and information security laws and regulations are often subject to differing interpretations, may be inconsistent among jurisdictions, and may be alleged to be inconsistent with our current or future practices. Additionally, we may be bound by contractual requirements applicable to our collection, use, processing, and disclosure of various types of data, including personal data, and may be bound by, or voluntarily comply with, self-regulatory or other industry standards relating to these matters. These and other requirements could reduce demand for our products, increase our costs, impair our ability to grow our business, or restrict our ability to store and process data or, in some cases, impact our ability to offer our service in some locations and may subject us to liability. Any failure or perceived failure to comply with applicable laws, regulations, industry standards, and contractual obligations may adversely affect our business. Further, in view of new or modified federal, state, or foreign laws and regulations, industry standards, contractual obligations and other legal obligations, or any changes in their interpretation, we may find it necessary or desirable to fundamentally change our business activities and practices or to expend significant resources to modify our product and otherwise adapt to these changes. We may be unable to make such changes and modifications in a commercially reasonable manner or at all, and our ability to develop new products and features could be limited.

The costs of compliance with and other burdens imposed by laws, regulations and standards may limit the use and adoption of our service and reduce overall demand for it, or lead to significant fines, penalties, or liabilities for any noncompliance. Privacy, information security, and data protection concerns, whether valid or not valid, may inhibit market adoption of our platform, particularly in certain industries and foreign countries.

Our business has been, and may continue to be, negatively affected by activist shareholders.

Responding to actions and communications by activist shareholders is costly and time-consuming, has diverted the attention of management, our Board of Directors and our employees, and may be disruptive to our operations. Additionally, perceived uncertainties as to our future direction as a result of shareholder activism may lead to the perception of a change in the direction of our business or other instability, which may be exploited by our competitors, cause concern to our current or potential customers, and make it more difficult to attract and retain qualified personnel. Furthermore, if customers choose to delay, defer or reduce transactions with us or do business with our competitors instead of us, then our business, financial condition and operating results would be adversely affected. In addition, our share price could experience periods of increased volatility as a result of shareholder activism.

Risks Related to Ownership of Our Common Stock

We do not regularly pay dividends on our common stock and thus stockholders must look to appreciation of our common stock to realize a gain on their investments.

Our dividend policy is within the discretion of our Board of Directors and will depend upon various factors, including our business, financial condition, results of operations, capital requirements, and investment opportunities. We therefore cannot make assurances that our Board of Directors will determine to pay regular or special dividends in the future. Accordingly, unless our Board of Directors determines to pay dividends, stockholders will be required to look to appreciation of our common stock to realize a gain on their investment, which may not occur.

The exercise of our outstanding stock options and warrants, and the issuance of RSUs and restricted stock would result in a dilution of our current stockholders’ voting power and an increase in the number of shares eligible for future resale in the public market which may negatively impact the market price of our stock.

The exercise of our outstanding vested stock options and warrants, and the vesting of RSUs and restricted stock dilutes the ownership interests of our existing stockholders. As of September 30, 2024, we had outstanding options, warrants and RSUs to purchase an aggregate of 287,908 shares of common stock representing approximately 8% of our total shares outstanding of which 258,432 were vested and therefore exercisable. To the extent outstanding stock options or warrants are exercised and RSUs vest, additional shares of common stock will be issued, existing stockholders’ percentage voting interests will decline and the number of shares eligible for resale in the public market will increase. Such increase may have a negative effect on the value or market trading price of our common stock.

Investors may have limited influence because ownership of our common stock is limited.

As of September 30, 2024, our executive officers and directors beneficially owned approximately 15% of our outstanding common stock. Because of their beneficial ownership interest, our officers and directors could significantly influence stockholder actions of which you disapprove or that are contrary to your interests. This ability to exercise significant influence could prevent or significantly delay another company from acquiring or merging with us.

Our protective provisions in our amended and restated certificate of incorporation and amended and restated bylaws could make it difficult for a third party to successfully acquire us even if you would like to sell your stock to them.

We have protective provisions in our amended and restated certificate of incorporation (“Restated Charter”) and amended and restated bylaws (“Restated Bylaws”) that could delay, discourage, or prevent a third party from acquiring control of us without the approval of our Board of Directors. These protective provisions include:

- A staggered Board of Directors: Only one or two directors (of our five-person Board of Directors) will be up for election at any given annual meeting. This delays the ability of stockholders to affect a change in control of us because it would take two annual meetings to effectively replace a majority of the Board of Directors.
- Blank check preferred stock: Our Board of Directors has the authority to establish the rights, preferences, and privileges of our 10,000,000 authorized, but unissued, shares of preferred stock. Therefore, this stock may be issued at the discretion of our Board of Directors with preferences over your shares of our common stock in a manner that is materially dilutive to you. In addition, blank check preferred stock can be used to create a “poison pill” which is designed to deter a hostile bidder from buying a controlling interest in our stock without the approval of our Board of Directors. We have not adopted such a “poison pill,” but our Board of Directors can do so in the future, very rapidly and without stockholder approval.
- Advance notice requirements for director nominations and for business to be brought before stockholder meetings: Stockholders wishing to submit director nominations or raise matters to a vote of the stockholders must provide notice to us within very specific date windows and in very specific form to have the matter voted on at a stockholder meeting. This gives our Board of Directors and management more time to react to stockholder proposals generally and could also permit us to disregard a stockholder proposal to the extent such proposal is not submitted in accordance with the Restated Bylaws.
- No stockholder actions by written consent: No stockholder or group of stockholders may take action by written consent. Along with the advance notice requirements described above, this provision also gives our Board of Directors and management more time to react to proposed stockholder actions.
- Super majority requirement for stockholder amendments to the Restated Bylaws: Stockholder proposals to alter or amend our Restated Bylaws or to adopt new bylaws can only be approved by the affirmative vote of at least 66 2/3% of the outstanding shares of our common stock.
- No ability of stockholders to call a special meeting of the stockholders: A special meeting of the stockholders, other than as required by statute, may be called at any time by the Board of Directors, or by the chairman of the board, or by the president, and any power of stockholders to call a special meeting of stockholders is specifically denied. Accordingly, stockholders, even those who represent a significant percentage of our shares of common stock, may need to wait for the annual meeting before nominating directors or raising other business proposals to be voted on by the stockholders.

In addition, the provisions of Section 203 of the Delaware General Corporation Law govern us. These provisions may prohibit large stockholders, particularly those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time.

These and other provisions in our Restated Charter, our Restated Bylaws and under Delaware law could discourage potential takeover attempts, reduce the price that investors might be willing to pay for shares of our common stock in the future and result in the market price being lower than it would be without these provisions.

Our Restated Bylaws designate a state or federal court located within the State of Delaware as the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to choose the judicial forum for disputes with us or our directors, officers, or employees.

Our Restated Bylaws provide that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, stockholders, officers, or other employees to us or our stockholders, (3) any action arising pursuant to any provision of the Delaware General Corporation Law, or our Restated Charter or Restated Bylaws or (4) any other action asserting a claim that is governed by the internal affairs doctrine shall be the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, another State court in Delaware or the federal district court for the District of Delaware), in all cases subject to the court having jurisdiction over indispensable parties named as defendants.

However, notwithstanding the exclusive forum provisions, our Restated Bylaws explicitly state that they would not preclude the filing of claims brought to enforce any liability or duty created under federal securities laws, including the Securities Act or the Exchange Act.

Any person or entity purchasing or otherwise acquiring any interest in any of our securities shall be deemed to have notice of and consented to this provision. This exclusive-forum provision may limit a stockholder's ability to bring a claim in a judicial forum of its choosing for disputes with us or our directors, officers, or other employees, which may discourage lawsuits against us and our directors, officers, and other employees. If a court were to find this exclusive-forum provision in our Restated Bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could harm our results of operations.

General Risk Factors

Failure to meet the NYSE's continued listing requirements could result in the suspension of trading of our common stock and a subsequent delisting of our common stock.

On August 28, 2024, we received a written notification from the NYSE that as of August 27, 2024, we were not in compliance with the continued listing standards set forth in Section 802.01B of the NYSE Listed Company Manual because the average global market capitalization over a consecutive 30 trading-day period and stockholders' equity were both less than \$50 million. In accordance with applicable NYSE procedures, we submitted a plan to the NYSE on October 11, 2024, advising it of the actions we have taken, are taking and plan to take that would bring us into conformity with the standard set forth in Section 802.01B within 18 months of receipt of the written notification. Upon receipt of our plan, the NYSE has up to 45 days to evaluate the plan and determine whether we have made a reasonable demonstration of our ability to come into conformity with the relevant listing standards. The written notification has no immediate impact on our ongoing business operations, reporting requirements with the SEC or the listing of our common stock on the NYSE at this time, subject to the NYSE's acceptance of our plan, any further processes required by the NYSE as well as our continued compliance with the plan and the NYSE's other continued listing standards. We are considering all available options to regain compliance with NYSE's continued listing standards but can provide no assurances that we will be able to satisfy the requirements of the NYSE.

Our common stock could also be delisted if our average global market capitalization over a consecutive 30 trading-day period is less than \$15 million. Our average global market capitalization over a consecutive 30 trading-day period may fall below \$15 million based on continued volatility and fluctuations in the market price of our common stock. In the event that our stock price does not meet the global market capitalization requirement, the NYSE will promptly suspend our common stock from trading on the NYSE and will simultaneously begin the process to delist our common stock, subject to our right to appeal under NYSE rules. While we may appeal this decision, there is no assurance that any appeal we undertake will be successful.

If shares of our common stock are delisted from the NYSE, there may be no public market for our common stock. Any over-the-counter or other market that does develop would likely be characterized by decreased liquidity and greater volatility, which may materially and adversely affect the value of our common stock. A delisting of our common stock could negatively impact the Company and holders of our common stock, including by reducing the willingness of investors to hold our common stock because of the resulting decreased price, liquidity and trading of our common stock, limited availability of price quotations, and reduced news and analyst coverage. These developments may also require brokers trading in our common stock to adhere to more stringent rules and may limit our ability to raise capital by issuing additional shares of common stock in the future. Delisting may adversely impact the perception of our financial condition, cause reputational harm with investors, our employees and parties conducting business with us, and limit our access to debt and equity financing. The perceived decrease in value of employee equity incentive awards may reduce their effectiveness in encouraging performance and retention.

We may need to raise additional capital to support our business growth, and this capital may be dilutive, may cause our stock price to drop or may not be available on acceptable terms, if at all.

We may need to raise additional capital, which may not be available to us when needed or may not be available on terms acceptable to us, to support our business growth or to respond to business opportunities, challenges, or unforeseen circumstances, including sales under our past and any future shelf registration statements. Our ability to obtain additional capital, if and when required, will depend on our business plans, investor demand, our operating performance, the condition of the capital markets, the terms of our current contractual obligations and other factors.

If we raise additional funds through the issuance of equity, equity-linked or debt securities, including those under our past and any future shelf registration statements, those securities may have rights, preferences, or privileges senior to the rights of our common stock, and our existing stockholders may experience dilution. Additionally, we are unable to predict the future success of any future offerings. Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales or other financings might occur, could depress the market price of our common stock, and could also impair our ability to raise capital through the sale of additional equity securities. If we issue debt securities or incur indebtedness, we could experience increased future payment obligations and a need to comply with restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we are unable to obtain additional capital or are unable to obtain additional capital on satisfactory terms, our ability to continue to support our business growth or to respond to business opportunities, challenges, or other circumstances could be adversely affected, and our business may be harmed.

The departure of Kendall Larsen, our Chief Executive Officer and President, and/or other key personnel could compromise our ability to execute our strategic plan and materially harm our business.

Our success depends on the skills, experience, and performance of our key personnel. Due to the specialized nature of our business and limited staff, we are particularly dependent on Kendall Larsen, our Chief Executive Officer and President. We have no employment agreements with any of our key executives that prevent them from leaving us at any time. In addition, we do not maintain key person life insurance for any of our officers or key employees. The loss of Mr. Larsen, or our failure to retain other key personnel or plan for the succession of key personnel, would jeopardize our ability to execute our strategic plan and materially harm our business.

We will need to recruit and retain additional qualified personnel to successfully grow our business.

Our future success will depend, in part, on our ability to attract and retain qualified engineering, operations, marketing, sales and executive personnel. Inability to attract and retain such personnel could adversely affect our business. Competition for engineering, operations, marketing, sales, and executive personnel is intense, particularly in the technology and Internet sectors and in the regions where we conduct our business. We may need to invest significant amounts of cash and equity to attract and retain employees and expend significant time and resources to identify, recruit, train and integrate such employees, and we may never realize returns on these investments. Additionally, we can provide no assurance that we will attract or retain such personnel.

War, terrorism, other acts of violence, or natural or manmade disasters as well as macroeconomic conditions may affect the markets in which we operate, our clients and our service delivery.

Our business may be adversely affected by instability, disruption, or destruction in a geographic region in which we operate, regardless of cause, including war, terrorism, riot, civil insurrection, or social unrest, and natural or manmade disasters, including famine, flood, fire, earthquake, storm, or pandemic events and spread of disease, such as the COVID-19 pandemic. Our business may also be adversely affected by further downturn in macroeconomic conditions, including inflation and rising interest rates, global political and economic uncertainty and tensions, such as the ongoing Russia-Ukraine and Israel-Hamas conflicts as well as any related political or economic response, counter responses or otherwise, financial services sector instability, a reduction in business confidence and activity, financial market volatility, and other factors. Such events can adversely affect our operations or the economy as a whole and may cause our customers to delay their decisions on spending for the services we provide and perpetuate significant changes in regional and global economic conditions and cycles. These events may also pose risks to our personnel and to physical facilities and operations, which could adversely affect our financial results.

Trading in our common stock is limited and the price of our common shares may be subject to volatility.

Our common stock is currently listed on the NYSE and was previously listed on the NYSE American LLC (formerly the NYSE MKT LLC). Over the past years, the market price of our common stock has experienced significant fluctuations. Between October 1, 2023, and September 30, 2024, the adjusted closing price on the NYSE for our common stock ranged between \$3.53 and \$9.22, adjusted for a 1-for-20 reverse stock split effective October 26, 2023. The price of our common stock may continue to be volatile as a result of several factors, some of which are beyond our control. These factors include, but not limited to, the following:

- Annual variations, actual or anticipated, in our operating results;
- Significant changes in our management;
- Large purchases or sales of common stock or derivative transactions related to our stock;
- Actual or anticipated announcements of new products or services by us or competitors;
- General conditions in the markets in which we compete; and
- General social, political, economic, and financial conditions, including significant volatility in the global financial markets.

In addition, we believe there has been and may continue to be substantial trading in derivatives of our stock, including short selling activity or related similar activities, which are beyond our control, and which may be beyond the full control of the SEC and Financial Institutions Regulatory Authority (“FINRA”). While the SEC and FINRA rules prohibit some forms of short selling and other activities that may result in stock price manipulation, such activity may nonetheless occur without detection or enforcement. We have held conversations with regulators concerning trading activity in our stock; however, there can be no assurance that should there be any illegal manipulation in the trading of our stock, it will be detected, prosecuted, or successfully eradicated. Significant short selling market manipulation could cause our stock trading price to decline, to become more volatile, or both. For more information regarding trading in our common stock and listing on the NYSE, see additional risk factors included elsewhere in this Quarterly Report on Form 10-Q.

We have broad discretion in how we apply our funds, and we may not use these funds effectively, which could affect our results of operations and cause our stock price to decline.

Our management has broad discretion in the application of our existing cash, cash equivalents and investments and could spend these funds in ways that do not improve our results of operations or enhance the value of our common stock. Pending their use, we may invest our available funds in a manner that does not produce income or that loses value. The failure by our management to apply our available funds effectively could result in financial losses that could cause the price of our common stock to decline and delay the development of our products.

In addition, an entity that, among other things, is or holds itself out as being engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting, owning, trading, or holding certain types of securities would be deemed an Investment Company under the Investment Company Act of 1940 (the “1940 Act”). If we do not manage our investments and business in a manner that meets the requirements for an exemption under the 1940 Act, we may be deemed to be an investment company under the 1940 Act and subject to additional limitations on operating our business including limitations on the issuance of securities, which may make it difficult for us to raise capital.

ITEM 5 — OTHER INFORMATION

Securities Trading Plans of Directors and Executive Officers

During the three months ended September 30, 2024, the Company did not adopt, modify or terminate and no directors or officers, as defined in Rule 16a-1(f), adopted, modified or terminated a “Rule 10b5-1 trading arrangement” or a “non-Rule 10b5-1 trading arrangement,” each as defined in Regulation S-K Item 408.

ITEM 6 — EXHIBITS

Exhibit Number	Description	Incorporated by reference herein			Filed Herewith
		Form	Exhibit No.	Filing Date	
31.1	Certification of the President and Chief 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.				x
31.2	Certification of the Chief 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.				x
32.1**	Certification of the President and Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				x
32.2**	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				x
101.INS	Inline XBRL Instance Document.				x
101.SCH	Inline XBRL Taxonomy Extension Schema Document.				x
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.				x
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.				x
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.				x
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.				x
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101).				x

*Includes management contract or compensatory plan.

**This exhibit is furnished herewith, but not deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to liability under that section. Such certifications will not be deemed to be incorporated by reference in any filing under the Securities Act or the Exchange Act, except to the extent that we explicitly incorporate them by reference.

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.

VIRNETX HOLDING CORPORATION

By: /s/ Kendall Larsen

Name: Kendall Larsen
Chief Executive Officer (Principal Executive Officer)

By: /s/ Katherine Allanson

Name: Katherine Allanson
Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

Date: November 13, 2024

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

I, Kendall Larsen, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of VirnetX Holding Corporation for the quarter ended September 30, 2024;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15 (e) and 15d-15 (e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15 (f) and 15d-15 (f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Kendall Larsen

Kendall Larsen

*President and Chief Executive Officer
(Principal Executive Officer)*

Date: November 13, 2024

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

I, Katherine Allanson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of VirnetX Holding Corporation for the quarter ended September 30, 2024;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15 (e) and 15d-15 (e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15 (f) and 15d-15 (f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Katherine Allanson

Katherine Allanson

Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

Date: November 13, 2024

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

In connection with the Quarterly Report of VirnetX Holding Corporation (the "Company") on Form 10-Q for the quarter ended September 30, 2024 as filed with the Securities and Exchange Commission on November 13, 2024 (the "Report"), I, Kendall Larsen, President and 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, to my knowledge:

- (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/ Kendall Larsen

Kendall Larsen
President and Chief Executive Officer
(Principal Executive Officer)

Date: November 13, 2024

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

In connection with the Quarterly Report of VirnetX Holding Corporation (the “Company”) on Form 10-Q for the quarter ended September 30, 2024 as filed with the Securities and Exchange Commission on November 13, 2024 (the “Report”), I, Katherine Allanson, 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, to my knowledge:

- (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/ Katherine Allanson

Katherine Allanson

Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

Date: November 13, 2024
